

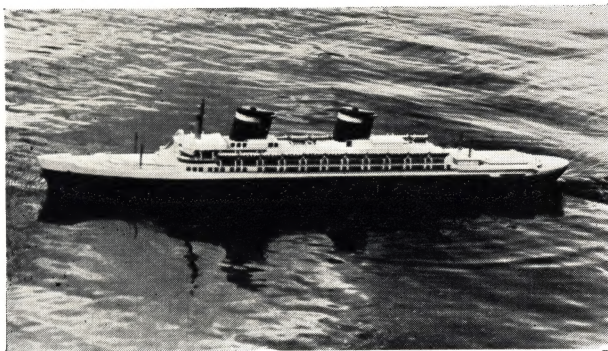
Ships **AND SHIP MODELS**

TWO SHILLINGS
OCTOBER 1954



Inside-ALAN VILLIERS on the U.S. SHIP "EAGLE"

A PERCIVAL MARSHALL PUBLICATION



Dear Sirs,
 "... About 15 months ago I had completed a metre length model of the S.S. United States and I was thinking about a suitable finish. I decided to try something new (at least to me) and decided on Valspar Lacquer. I was delighted with the result. I will say that I invested in a good brush which assisted no end in getting the water lines, etc., very true.
 I have been ship modelling for nearly 30 years now and my models are not the front room glass case stuff, but made to sail in real salt water—in the sea off Hayling Beach or in Southsea Canoe Lake, and I will say that in spite of continual sailing, the finish on the model photographed is still as good as new; no fading, fingermarks or brushmarks are visible. ..."

Yours faithfully,
 (Signed) L. H. KING

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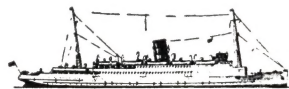
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Ships **AND SHIP MODELS**

INCORPORATING MODEL SHIPS & POWER BOATS

Vol. VII. No. 82. OCTOBER 1954

THE SHIP'S LOG

Managing Editor
E. F. H. Cosh

Editor
Edward Bowness, A.I.N.A.

Advertisement Manager
T. C. Page

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Looking back on this year's "M.E." Exhibition we feel we can safely say that the interest in ships and in ship modelling as a hobby is in a very healthy condition. Not only was the number of entries much larger this year than last but their quality was on the whole better. This was especially the case with the miniatures. There seems a greater tendency to make miniatures as scenic models, the modelling and painting of the sea being treated as an essential part of the job and not as was so often the case, merely as a base on which to place the ship. A good miniature can be a very attractive feature in a room, and if the brightness of the colouring is somewhat emphasized, as is permissible in a small decorative object the effect can be improved very considerably. Donald McNarry's smaller models are good examples of this, particularly those he has made of Stuart ships and especially his latest one, of the Royal Yacht *Fubbs*. This was almost like a piece of jewellery, with its bright flags and its sparkling sea. There seem to have been fewer square-rigged sailing ship models in recent Exhibitions; that is, of the static glass-cased variety. On the other hand the square rigger as the prototype for a sailing model is increasing in popularity. This is a very welcome tendency. There is a great thrill in seeing a square rigger sailing in a moderate breeze. The tank at the Exhibition proved a great attraction, and this year it was very noticeable that the radio controlled models were much more dependable in their performance and more varied in their operations than in previous years. It is obvious that radio control is making progress, especially with the operation of boats. A large proportion of the power driven boats entered for competition this year was arranged to be controlled by radio. The demonstration stand was very popular with ship modellers and with Collin's 50-gun ship, Draper's small boats and Chapman's hulls there was a constant stream of enquirers. Perhaps the feature which aroused most interest was the fibre-glass hull construction of which more anon.

We were rather amused at a remark overheard during the Exhibition. A lady taking round her small boy had to tell him, "Don't touch the models Tommy, can't you read the cards?" "That man's touching them," he said. "But he is a judge," she explained. "A judge," the boy replied thoughtfully, and then after a pause, "Does he hang people?"

OUR COVER PICTURE

This month our cover picture shows the Norwegian motor tanker *Polarsol* coming out of Fawley after discharging a cargo of crude oil from the Middle East. The *Polarsol* was built in 1939 and has a tonnage of 10,022 gross. She is owned by Melsom & Melsom of Nanset near Larvick. She is being towed by the 242 ton tug *Beamish*. Owing to the construction of the huge oil refinery at Fawley, the towage facilities in the Solent have been quite incapable of dealing with the work, and the Southampton, Isle of Wight & South of England R.M.S.P. Co. Ltd.,—better known as the Red Funnel Line—have had to charter tugs from elsewhere while new tugs are being built. The *Beamish* is owned by the France, Fenwick, Tyne and Wear Co. Ltd., and is better known on the north-east coast than in the Solent.

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The Barque "Eagle." U.S. Coast Guard photo

THE beautiful big barque *Sagres*, of about 3,000 tons gross, was at Portsmouth for a week during August and the Danish full-rigged ship *Georg Stage* was at Leith earlier the same month. Not long ago, a couple of shapely Swedish schooners visited Southampton Water on their way back from a winter's cruise to the West Indies with Swedish naval cadets, and the ship *Danmark* visited London before setting out on a similar voyage. Why all these sailing school-ships? Why have we no such ship, if they are so worth while? I receive quite a few letters directly, and more are sent on by the Seafarers' Education Service and the BBC, from young fellows who ask how can they, as Britishers, see a little service under deep-sea square sail? I'm sorry that I have to disappoint them. There is an increasing interest in this country in the general subject of the use of sails in character training, but—so far at any rate—we have only a largish yacht or two and one schooner devoted to that purpose. The yachts are at Aberdovey and at Warsash, where good use is made of them, and the schooner is used by the Gordonstoun school and the Scots Outward Bound Sea School. We have no square-rigger, and have not had one (my *Joseph Conrad* doesn't count as she was not national—I paid all the bills) since Devitt and Moore's ran their fleet of beauties almost up to the end of the first world war.

This year, and last, I've been looking into the general subject. I've had the good fortune of sailing in the Portuguese, the Danish, and the American square-rigged school-ships, the *Sagres*, the *Georg Stage*, and the *Eagle*. Of these—and they are all good—in some ways the *Eagle* is most interesting. She represents a revival in the use of sail, and that's something we have always been told is impossible.

More about those Training School

★ another informative article by

The *Eagle* was formerly the German naval sailing school-ship *Horst Wessel*, built in Germany by the Nazis in 1936 along with a couple of sister ships, the *Gorch Foch* and the *Albert Leo Schlageter*. The *Foch* is now a Soviet Russian school-ship in the Black Sea, I believe, and the *Schlageter* is Brazilian. At the end of the war, the *Eagle* was taken over in Bremerhaven by the United States Coast Guard, for use as a training ship. She could have been acquired by Britain—either the *Eagle* or one of the others. But, we said we had no one to run such a ship, and we had precious little interest in the deal anyway, as far as I can make out. The Americans had no one who could run the ship either, if you mean by that that there was no one who could step out of one square-rigger into the other, with a continuity of practical experience. They had no officer at all who had ever commanded such a ship, and very few who had ever sailed in one. But that did not deter them. They knew the *Eagle* was good value. They had a long tradition of sail-training, dating back to the old barque *Chase* and the barquentine *Alexander Hamilton*, both of which were frequent visitors to Britain years ago. They still had some senior officers who had received their *ab initio* training in the *Alexander Hamilton*, and they had done their best to maintain what they could of the sailing tradition, by means of yachts and small schooners. Sailing in these was always a feature of the life at the Coast Guard Academy, and still is.

It took some foresight and it took some guts to run the big barque *Eagle*, after the war. She is an expensive ship to run. She is equipped with a good diesel (as are all the sailing school-ships except only the little Norwegian *Sorlandet*), but she had no winches to aid in the work on deck. There was not a single enlisted man left in the Coast Guard with square-rig experience. The *Eagle* is a fast sailer, a sensitive ship which takes expert handling. The diesel—it is a 700 h.p. German M.A.N.—was a considerable help, naturally, especially in the early stages. But if the *Eagle* was to be used as a motor-ship which occasionally set her sails, on a fine day, then she was not worth acquiring. So the Americans set about learning the business of handling a square-rigger afresh—practically from scratch. Such a thing, as

Ships

ALAN VILLIERS



The Portuguese barque "Sagres"—a lovely big Sailing School Ship

far as I know, had never been done before.

There were a good many people, including some in the Coast Guard itself, who said it couldn't be done at all: and some of them added that, if it could, what was the use? Why fool about with a sailing-ship in this day and age? Didn't everybody have to work all out to study electronics and meteorology and naval architecture and all the rest of it, without bothering to learn to be a sailing-ship sailor as well? Why, if you were going to be handed a car to drive all the days of your life, bother with learning about a horse first? Or any other time? What *was* it all about?

But the Coast Guard knew what it was at. Quietly, and not without difficulty, the *Eagle* was recommissioned there in Bremerhaven. She'd been used by the Luftwaffe towards the end of the war and as a transport; but she was still in splendid order and she still had all her sails and rigging. The Americans took it easy. Using some Germans who knew the ship and a sprinkling of Danes as well as a Coast Guard crew, they went out into the North Sea for the passage to New London. Motoring when they had to, gradually they learned to use the sails—over the North Sea, down-Channel, through the Bay of Biscay. They went the Trade Winds way towards

A haul on the main braces

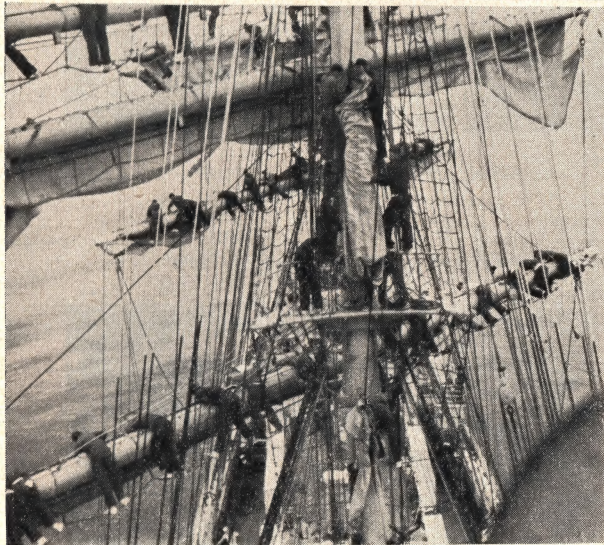


Below: Learning about rigging aboard the "Sagres"



America—the way Columbus went, with the northeast Trade Winds behind the ship to blow her along. That way was easier. The *Eagle* sailed across without incident, calling at Bermuda on the way, and the Coast Guardsmen learned a lot.

Then she became the official seamanship school and training ship of their Academy. The Coast Guard Academy ordinarily has some 500 young men in training, of whom something more than half graduate to become officers in the seagoing ships and aircraft which the Coast Guard operates—on patrol, as weather ships, ice patrol, revenue and law enforcement vessels, light and buoy tenders, and so forth. The custom is that these young men are trained ashore about 9 months of the year, and the other three months they sail. The *Eagle* can take about 200 of them at a time, and she usually makes one transatlantic voyage and one West Indies voyage each year, taking about half the school on each. The value of her training lies not only in its character-forming. It has other useful qualities. It is cheap (as compared with the cost of running



Cadets do all the work aboard the "Eagle" and some senior cadets act as watch officers

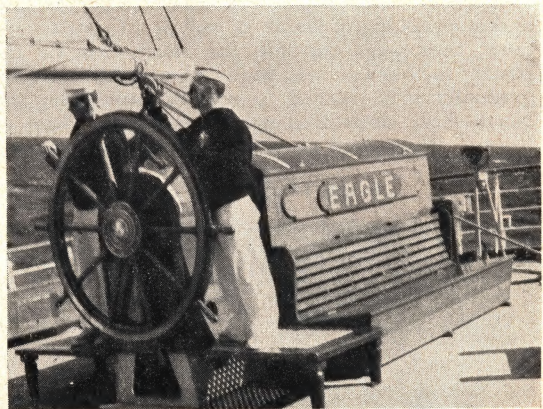
powered ships enough to take so many boys) and the cadets are always under direct observation. Lads working in the rigging and about the decks of a big sailing-ship can scarcely help being in full view. The Coast Guard likes to know what manner of chap it is training, and the sailer shows up humanity at sea rapidly and without distortion. The *Eagle* is a testing-ground as well as training, and those who do not make the grade are thrown out forthwith, to waste their country's time and money no more. That is a great advantage!

It is eight years now since the *Eagle* was brought back in service. Four men have commanded her, not a single one of whom had ever handled any other square-rigger. At no time has a specialist officer been brought from abroad, from other school-ships, to help. The Coast Guardsmen have figured this out their own way, for themselves. That was part of the value of the ship. I must say that, judging from what I saw (and I was aboard a whole cruise and not just for a dogwatch), they have made a mighty good job of it. I would not have believed that such a thing could be done. Nor do they try to build up a nucleus of skilled crew and keep them there. There is only

a small crew of enlisted men in the *Eagle* at any time, and the majority of these are cooks and stewards. The barque has no permanent officers appointed to her and to her alone, to get on with learning about her. She is commanded by an officer of captain's rank who is also head of the seamanship department at the Academy, and that is his main job. His executive officer and all his other officers are instructors on the staff of the Academy who volunteer for the cruise. Only the boatswain is actually appointed to the *Eagle*, and he stays there four years and then goes to another appointment no matter how much he may be missed. Seamanship instructors and boatswains' mates come and go, though there is a sailmaker from the *Danmark*. Sailmaking is an art which must be maintained, but the sailmaker is the only man aboard who came from another sailing-ship. It is amazing.

Even more amazing is the way the cadets themselves handle the sails and the gear and, indeed, the ship herself. The Academy officers reasoned that, if they could revive this sailing-ship science, then what was to stop intelligent youths from quickly absorbing sufficient to be able to handle the ship themselves, in reasonable conditions at sea? There was, after all, no black magic in the sailing-ship art. There was always the big diesel, if things went wrong: and they were called upon to sail only in the summer months. The cadets must get the maximum advantage, not just be pushed about by numbers to learn drill but not sail-handling, to become automatons but not sailors.

And so a system was introduced whereby the upper classmen—the cadets with three years in—actually do serve as the watchkeepers on deck, as captains of the tops, as bos'n's mates and all the rest of it. Under the watchful eye of Captain Bowman



Two cadets at the wheel of the "Eagle"

(who has been in the ship four years now and is due to take up another appointment, in Washington), the cadet officer-of-the-watch gives the orders, weighs up the wind and the wind-shifts, trims the sails. Of course, the vessel, now and again, goes through some

queer evolutions. There may be occasions when the trim of the sails is somewhat ragged, to an old Cape Horner's view. But no matter—the system works. By making mistakes the lads learn. By exercising authority they develop—and they develop fast.

I left the *Eagle*, the other day, wondering why something of the kind could not be done here. One gets a little tired of hearing about the absence of experienced men. . . . Then I visited the *Sagres* when she was in Portsmouth. (I'd sailed in her on her cruise in 1952.) Any officer in the Portuguese Navy can be appointed to the *Sagres* and is called upon to

handle the big barque forthwith—nor do they fail. In many ways the *Sagres* resembles the *Eagle*. She is allowed no such luxury as a skilled nucleus of hoary old shellbacks steeped in the ways of sail, though she does have a few who've been in the ship for years—very few.

The Portuguese are great sailors and they handle the *Sagres* well; but neither they nor the Americans hold any brief for the so-prevalent idea that, to sail a square-rigger, you practically have to be born in one.

Maybe there's a lesson in all this, for us.

TOPICAL DIGEST

A Big New Floating Dock

A new floating dock has been recently delivered to a firm at Gothenburg and is claimed to be the largest in Scandinavia, incorporating a number of novel arrangements, it was built by Jos. Boel et Fils S.A., of Tamise, Belgium, to Gotaverken's own designs.

One interesting device, said to be unique in its application to floating docks, makes possible the abolition of the usual tanktop in the wide walls of the dock. A system of electrode ensures that the water in the tank shall not rise above a certain level by closing the inlet valves automatically when this level has been reached. This innovation saves much construction material and reduces the weight of the dock, thereby increasing its lifting capacity.

With an overall length of 713 ft. 10 in., overall breadth of 132 ft. 9 in., entrance breadth of 100 ft., and height of walls above pontoon deck of 39 ft. 4 in., the new dock has a lifting capacity of 28,000 tons, which will make possible the docking of ships of up to 45,000 tons d.w. It will complete a set of three floating docks at the Gotaverken yards, the other two having lifting capacities of 18,000 tons and 8,000 tons respectively.

The new dock has been built with 10 pontoons and two continuous side walls. The two end pontoons are T-shaped and the remainder rectangular. All the pontoons were built separately and any pontoon may be taken out for overhaul work. The two end pontoons have a lifting capacity sufficient for the docking of the second largest floating dock at Gotaverken yards.

The finished side walls, which have a length of 613 ft. and a horizontal section of 16 ft. 6 in., have two decks—a crane deck, which is being fitted at Gotaverken with two cranes of 12 tons lifting capacity each and which will handle all the material in the dock, and a manoeuvring deck.

The "Saxonia's" First Trips

The new Cunard "Saxonia" which last month completed her trials and maiden voyage was fully booked for her first two outward trips to Canada and on the voyages carried a complement of 125 1st class and 800 tourist class passengers.

When the St. Lawrence becomes impassable from ice during the winter months, the "Saxonia" will be transferred to the Liverpool-New York run for the period.

New South American Service Liner

The passenger and cargo liner "Reina del Mar" (19,320 tons gross), the latest addition to the Pacific Steam Navigation Company's fleet, is due to be launched next May at the Belfast shipyard of Harland and Wolff, where she is now under construction. She is expected to leave Liverpool

on her maiden voyage to the west coast of South America in January, 1956, and will join the motor ship "Reina del Pacifico" (17,872 tons gross) in regular service from the United Kingdom, France, and Spain to Bermuda, the Bahamas, Cuba, Jamaica, Panama, Colombia, Ecuador, Peru and Chile.

The "Reina del Mar" will be the largest British vessel serving the west coast of South America. She will carry 776 passengers. The cargo capacity will total 305,000 cubic feet, of which 20,500 will be refrigerated. The hull, which will be fitted with stabilising fins, will have a length of 600 ft. and a beam of 78 ft. Oil-fired boilers and steam turbines driving twin screws will give a service speed of about 18 knots.

P. & O.'s "Iberia" Sails

After completion at the Belfast shipyard of Harland and Wolff, the P. & O. lines new liner "Iberia" which is 28,000 tons gross started on her maiden voyage to Australia on September 28th.

32,100 ton Tanker

The first of two new tankers, each of 32,100 tons deadweight, being built at the Barrow-in-Furness yard of Vickers Armstrongs Ltd., for the British Tanker Co. Ltd., was launched on August 31st last. It was named "British Sovereign."

next month

The November edition of SHIPS & SHIP MODELS will feature

REGATTA REPORTS

Description and photographs of the prototype models at the Grand Regatta at Victoria Park, London, and fully illustrated report of the 10 rater National Regatta at Hove.

FLAGS ON SHIP MODELS

A valuable article by our flag expert Mr. A. A. Purves on the flags on the ship models at the recent "M.E." Exhibition. Too little attention is usually given to this important subject.

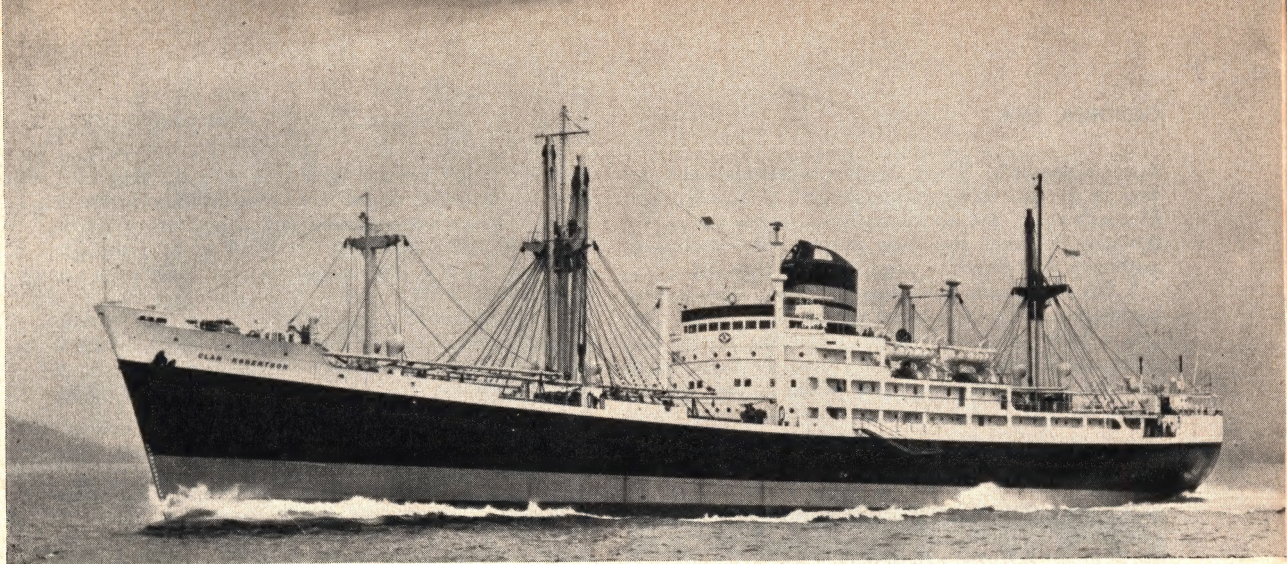
NEW BLOOD IN MODEL YACHTING

A thoughtful and provocative article on the possibilities of a new class in model yachting suggested by recent developments in full size yachts introducing possibilities of planing.

In addition there will be the popular Fleet Review, Ships in the News, and Stories of life at Sea by well-known writers, not to mention the constructional articles on the 50 Gun Ship and the A Class Double Chine Sharpie.

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GUMHURYAT MISR AND MECCA

In the late 'twenties Canadian National Steamships ordered five passenger liners for their Canada-West Indies services. They were all built by Cammell Laird & Co. Ltd., and were completed in 1928-29 as the *Lady Drake*, *Lady Hawkins*, *Lady Nelson*, *Lady Rodney* and *Lady Somers*. The first three were identical and were designed to maintain a fortnightly service from Halifax, N.S., to the more easterly of the various islands. These three ships were 438 ft. in length o.a. × 59 ft. 3 in. breadth and had accommodation for 103 first, 32 second and 100 third class passengers. The other two vessels, the *Lady Rodney* and *Lady Somers* were for a similar fortnightly service between Montreal in summer or Halifax in winter and Bermuda, Nassau in the Bahamas, and Kingston, Jamaica. These two, on this more westerly service, differed from the others in having a slightly greater beam, 60 ft. 3 in., and accommodation which was limited to 103 first class passengers only. All five had twin screws and Parsons S.R. geared turbines, which gave a speed of 15 knots. Only two of these handsome looking ships survived the war, these being the *Lady Nelson* and *Lady Rodney*. When they eventually returned to the West Indies trade it was found that they could not compete with air transport. Last year they were therefore sold to the Khedivial Mail Line S.A.E., of Alexandria, who renamed

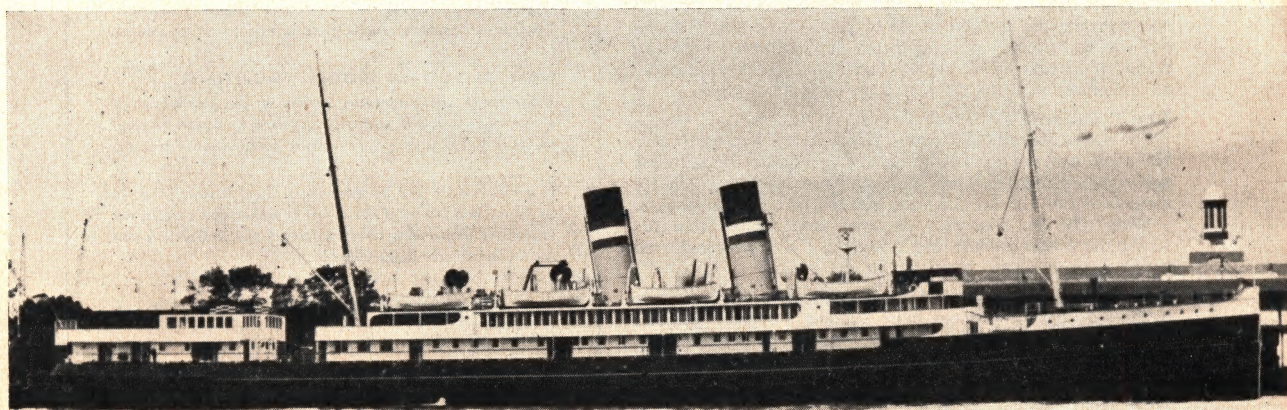
SHIPS

them *Gumhuryat Misr* and *Mecca* respectively. The *Gumhuryat Misr*, which has been used on this company's Alexandria-Beyrouth-Italy-Marseilles-Philadelphia-New York service, is now scheduled to operate between Alexandria and Marseilles.

Ports of call vary, but generally include Naples, Genoa, Beyrouth and Port Said. Both she and the *Mecca*, which has so far seen little service, are now fitted to carry first and tourist class passengers. The two ships differ slightly in appearance, for the *Mecca*, 8,252 tons, retains her original three island layout, while in the 7,830 ton *Gumhuryat Misr* the bridge and poop decks have been merged into one. The apparent paradox in tonnage is explained by the former's greater beam.

WOODLARK AND ORANJE NASSAU

Two very well-known North Sea ships which have lately been sold are the General Steam Navigation Co.'s *Woodlark* and the Zeeland Line's packet steamer

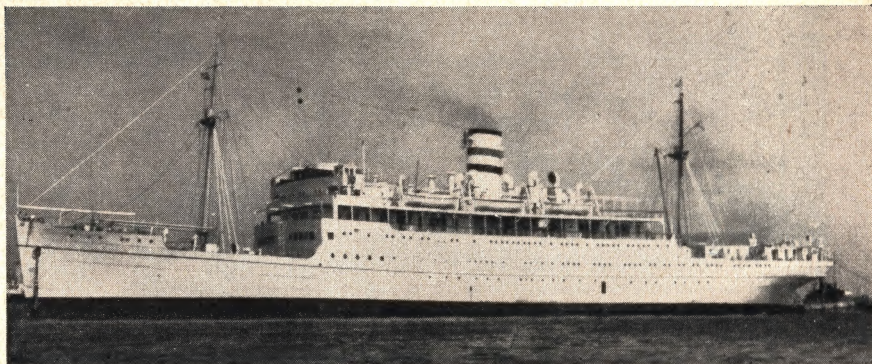


Heading : S.S. "Clan Robertson"
7,878 tons gross

Left, below : S.S. "Oranje Nassau"
2,957 tons gross

Right : The Khedivial liner S.S.
"Gumhuryat Misr"

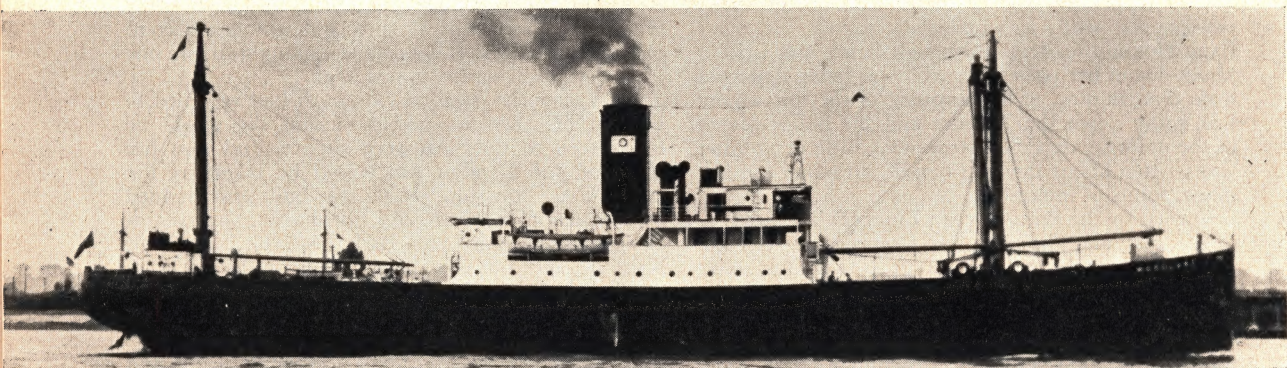
Below : The G.S.N. Co.'s S.S.
"Woodlark" now under new owner-
ship



Oranje Nassau. The *Woodlark* was built at Troon by the Ailsa Shipbuilding Co. Ltd. in 1928, a 13-knot steamer of 1,552 tons gross and 240 ft. in length b.p. After many years on the company's London-

Company was seeking replacements, the Fairfield Co. was too busy to guarantee quick delivery and so the Royal De Schelde yard was commissioned to build a new *Mecklenburg* and *Prinses Juliana* from the original plans. These were delivered in 1920-22 and like the earlier ships were fitted with triple expansion engines. During the last war this second *Prinses Juliana* was sunk, but the *Mecklenburg* is still in regular service. The *Oranje Nassau* was a three deck ship of 2,957 tons gross, with dimensions 350 ft. b.p. by 42 ft. 7 in. and latterly had accom-

in the news



Continental services she is now to operate in the Eastern Mediterranean under the name of *Halcyon Med*, her new owners being the Cyprus Merchants Shipping Co. Ltd., Limassol. Not quite the oldest in the G.S.N. fleet, she leaves there four others of approximately the same vintage. These, whose sale must be expected in the not too distant future, are the *Cormorant*, 1927 (1,230 gross), *Falcon*, 1927 (1,038 gross), *Groningen*, 1928 (1,274 gross) and *Starling*, 1930 (1,356 gross). The illustration shows the *Woodlark* after her originally very tall funnel had been shortened.

The two funnelled *Oranje Nassau* was a truly remarkable vessel and by far the oldest ship of her type operating across on any of the main U.K.-Continental passenger routes. One of three sisters built for the Zeeland Line by Fairfields in 1909, she and the others, which were named *Mecklenburg* (1) and *Prinses Juliana* (1) were fitted with twin screw triple expansion engines, despite the fact that they were designed for a speed of 22½ knots. The other two ships were both sunk in 1916. Afterwards, when the

modation for 530 passengers. Although she was best known on the Harwich-Flushing service, she was also often seen in the Thames, for she was used for several summer seasons—1949 to '52—to augment the Muller Line's Tilbury-Rotterdam service.

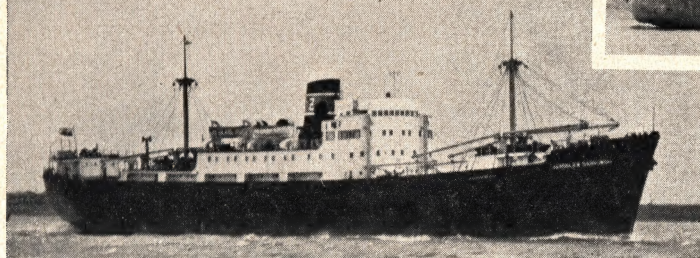
CLAN ROBERTSON

The *Clan Robertson*, the first of a new series of cargo-passenger liners for the Clan Line Steamers Ltd., is now in service. Her maiden voyage was to South African ports, thence from Durban to India, in ballast. She was built by the Greenock Dockyard Co. Ltd., who will also be responsible for the two remaining ships in this class, the *Clan Rose* and *Clan Ross*. All three are designed to operate on any of the Clan Line's many services and with a service speed of 16¾ knots will be amongst their fastest vessels. A notable feature of their design, and one which distinguishes the "R" class from the rest of the Clan fleet, is the extension of the superstructure to the mainmast, No. 4 hatch being trunked to bridge deck level. All three carry very heavy loads,



The Polish liner "Jaroslaw Dabrowski" before and after modifications

Below : S.S. "Piast", which replaces the S.S. "Jaroslaw Dabrowski" on the London service



such as locomotives, etc. on deck and are remarkably well equipped with derricks. Besides those of normal size, ten 5-tons and four 7-tons, there are also two of 15 tons, two of 40 tons and one of 90 tons capacity.

The *Clan Robertson*, which has accommodation for 12 first class passengers, measures approximately 502 ft. in overall length, and is of 7,878 tons gross, 10,118 d.w. and 15,753 displacement. She is fitted with two Babcock & Wilcox water-tube boilers which supply steam to a set of Parsons D.R. geared turbines. These normally develop 9,400 s.h.p., but have a maximum of 10,340 s.h.p.

JAROSLAW DABROWSKI

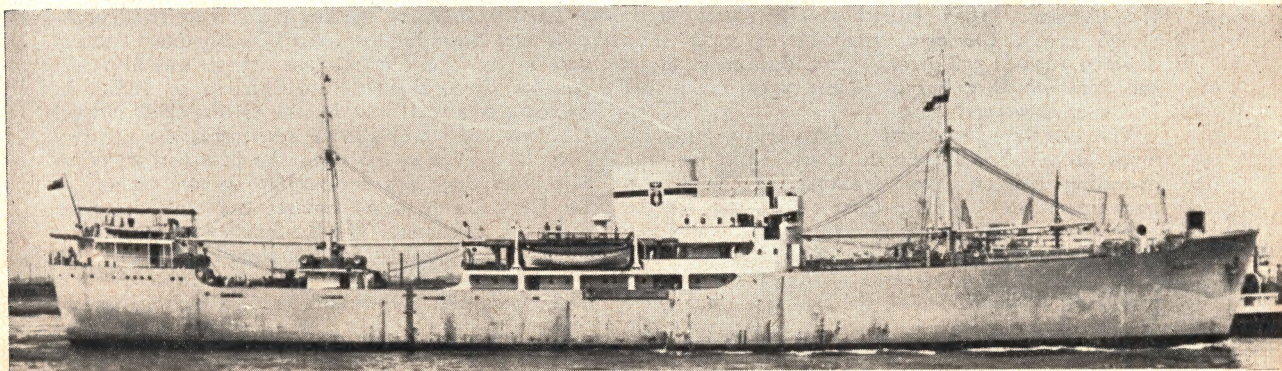
The happenings aboard this Polish ship provided newspapers with a wonderful subject for their Bank Holiday readers. Although much was written about one of her passengers who was being deported from this country, of the stopping of the ship as she was going down the Thames and the police rescue of the unfortunate Polish stowaway, little or nothing was written about the ship herself, although she has many points of interest.

Owned by the Polish Ocean Lines (Polish Government), Gdynia, the *Jaroslaw Dabrowski* is a single screw steamer of 3,219 tons gross and just over 3,000 tons d.w. with accommodation for 12 passengers. She was specially designed for the carriage of dairy produce from Poland to the U.K. and has space for 120,000 cu. ft. of refrigerated cargo. The hull, which is strengthened for navigation in ice, measures 356.7 ft. in overall length and has a breadth of 48.6 ft. A single set of triple expansion engines gives a speed of $13\frac{1}{2}$ - $14\frac{1}{2}$ knots. One of the few modern British ships in this fleet, the *Jaroslaw Dabrowski* is an "odd" ship without sisters and was built by the Blyth Dry Docks & Ship Building Co. Ltd. The occasion of her

launching, on July 29th, 1950, marked a break from normal practice, for although the usual bottle of wine was broken across her bows, the new ship was not named then. It was not until some months later when the completed ship had reached Gdynia, her home port, that this ceremony was performed.

Originally the *Jaroslaw Dabrowski* had a wide, slightly tapered funnel with slanting top. This, like the hull, was painted black but carried the Zegluga markings, a white Z on a red, white edged band. This, however, has been replaced by a thinner and taller funnel with a horizontal top. Painted buff, it has a narrow red band with the Polish Ocean Lines' very elaborate red and white design each side. As the illustration shows, the hull is no longer black but grey. The result of these changes has been to change a striking and handsome looking ship into one of rather nondescript appearance.

Soon after the *Jaroslaw Dabrowski* had returned to Gdynia her owners announced that she would be transferred to their Antwerp service, and that her place on the London run would be taken by the m.v. *Piast*. This ship, which was built and engined by Burmeister & Wain, of Copenhagen, was originally ordered by Skjelsbred's Rederi A/S (Kr. Knudsen), Kristianssand, but was bought while on the stocks by the Polish Ocean Lines. Tried on February 15th, 1951, she has since been used on a variety of routes, even going as far afield as China. Designed as a fruit carrier, she has four holds of which Nos. 2, 3 and 4 are fully refrigerated. She is considerably faster than the other ship and was designed for a loaded trial speed of $16\frac{1}{2}$ knots. Her main dimensions are length overall 337.7 ft. by breadth 47.1 ft., while her gross tonnage works out at 3,184. In appearance she resembles her consort *Czech*, both being of typical Scandinavian fruit-ship design.



MASTER in SAIL

INSTALMENT TEN

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PERCIVAL MARSHALL

Price 12/6.

BY CAPTAIN JAMES S. LEARMONT

Captain Learmont's anxiety when he sailed from Newcastle, N.S.W., in the Bengairn, with a cargo of steam coal for Valparaiso proved to be well founded. It was indeed a sorry-looking ship which crept into Sydney Heads some time later, after grappling with the most appalling weather. But at least ship and crew were safe, which was something of a record on this notoriously bad sailing route, on which so many ships had been reported lost.

THE carriage of coal from New South Wales to Valparaiso and other west coast ports was responsible for the loss of more ships than any other trade that I have known. Raes' alone had lost two ships, the *Chipperkyle* and the *Solway*, and day after day on reading the overdue list you would see the names of ships out of Newcastle, N.S.W., quoted for re-insurance, but they never arrived.

In our case with ordinary steam coal we had hundreds of tons of space empty when fully loaded. Trimmers were not very concerned; as long as they got your full weight under hatches they were paid. Loading more fully in the midship section and leaving the ends free would have been safer, but they were a law unto themselves, resenting interference by anybody.

This continual loss of ships on passage from Newcastle to the west coast had naturally given me concern for a long time as I knew it formed a large part of the work of a sailing ship. When I had loaded at Newcastle with the *Brenda* in 1906, I didn't worry as the cargo was the light gas coal and it was only with difficulty that we got the total weight under hatches. I had talked to my father for years about these losses and he considered that they were due to fire, but I would not accept that and maintained that the cause was the cargo shifting. In cases of fire there was always the chance of being picked up, because as a rule you had time to abandon ship, whereas in these cases no one was ever saved. I always ended the discussion by saying that if ever my cargo shifted I would chop the masts out of her.

I had decided to sail early in the day as I did not consider it desirable to leave with darkness coming on and a new crew. The pilot and tugs were ordered for 8 a.m., but all day we lay at the buoy waiting, until just before dark the old tug *Bungaree* came alongside by herself to tow us out to sea. She, on account of her age, was not certified beyond the limits of Newcastle Harbour. In reply to my demand for the reason of delay and the whereabouts of the second tug he told me that the *Champion* was short of a cook and so could not go to sea. As soon as we

neared the Nobbies the tug signalled his intention of casting off the towrope; as the wind was fair I did not mind.

With three lower topsails set and the foresail, the *Bengairn* was speeding away towards the south-east before a rapidly increasing wind. My barometer was low, the sea was one mass of phosphorescence and it somehow seemed uncanny. I cannot explain my change of attitude on this particular occasion in relation to the weather; it was most unusual for me to be under only lower topsails and steering a course. There was of course the factor of a new crew, less than thirty-six hours on board, and the consideration that we were entering a part of the ocean where you commonly ran, as we did, right into bad weather after leaving port. She was going away before the northerly gale doing eight or nine knots, so there was not much loss in time, yet somehow I had a premonition that I should be cautious.

We had had a great number of rats in the *Bengairn*, but whilst we were in Newcastle my wife noted that they were not about as usual and openly said she didn't like it. Her fears were strengthened as somehow it got aft that Frank had noticed the rats leaving the ship in hordes one night. I naturally pooh-poohed the whole thing as nonsense, saying that the last of the loose grain from our previous cargo had been eaten by them, and that they were leaving to look for food.

Next day it blew much harder and the seas were rising but she went along without doing any damage. On the following day the seas were very heavy and she with the wind on the quarter was lurching heavily. After one particularly heavy lurch I heard an ominous sound coming from the hold and she failed to right herself. The Jap was at the wheel. I ordered him to put the helm up so that we would get away before the wind and so bring wind and sea astern, but she was as if dead and failed to answer the helm. First I ordered them to let fly the lower mizzen topsail sheets in an endeavour to make her pay off, then the lower main topsail sheets, but the list increased. The sea was now making a clean breach of the whole of her starboard side. To relieve her, I next ordered the foresheet to be let go, and Frank literally dived under water to do this; how he managed to keep himself from being caught in the wire foresheet that was torn out by the threshing of the foresail after he had slacked it off, I don't know.

On deck the scene was one of desolation; as the big combers came along they swept everything before them overboard. From the minute she heeled over it was really a terrifying sight, a fine ship on her beam ends with the seas battering the whole of

(Continued from September issue, page 349)

her starboard side as she lay helpless, unable to escape from their fury as they stripped her of anything that was movable.

The ship was to all intents and purposes in her death throes, but we had to save her if possible in order to save ourselves. All the boats on the lee side had been swept away, and with the heavy list you could have walked outboard on her weather side, so it was useless to think of trying to lower the one remaining lifeboat. There was a movement by some of the crew while I was down in the hold to lower this boat, but Frank stopped it, saying, "When the Capen says lower that boat, we'll lower it, but not before. Get away from here." As he was carrying an axe his words had weight.

The heel of the ship was such that one-half of No. 2 hatch between the main and mizzen masts was under water, and this hatch now became our principal concern as the tarpaulins started to wash off. Unknown to us, the bulwark stanchions under the strain of the ship lying on her side had been sheared off in the scuppers and water was pouring in there as well as through the No. 2 hatch. When the carpenter sounded the well he found four feet six inches of water. As the sounding-pipe was amidships, she must have had much more on the lee side.

Close the hatch we must if we wanted to see daylight again. Every conceivable plan was tried to get spare tarpaulins over it with lashings but they were washed back on us. I then decided on trying with a brand new lower topsail bent on to a new rope as if it were the jackstay on a yard. After getting sufficient rope on each end we hove it tight by using the two capstans on the weather side which was free of water. When the sail was bent we furled it, using rope yarns as stops. Easing the capstans, on our hands and knees we pushed the furled sail over the combings, literally diving as the sea was breaking clean over us, but it soaked the sail and somehow helped by increasing its weight. At last with a final heave over it went, and we yelled, "Heave away!" The rope, a four-inch manila, took the strain: the sea couldn't budge him. Then by diving again we cut the stops and, the sea helping us, covered the breach with the sail. With an additional coil of rope we were able to secure it firmly around the hatch combings.

We had secured the hatch but our position was still perilous. With so much water in the ship, her freeboard under ordinary conditions would be reduced by two feet; but now, on her beam ends, it was only a matter of time how long she would last.

With darkness coming on and the gale unabated I decided to cut the topmast backstays and let the top hamper go. As soon as the seizings were cut on the mizzen the topmasts doubled over above the cap and the whole lot went in a mighty crash. Frank was like a Trojan as he wielded saw and axe, encouraging his helpers in forcible language.

The loss of the top hamper on the mizzen relieved the ship considerably so I decided to cut the main away as well. This action eased the leverage for, in all, on each mast, topmast and topsail yards, top-

gallant yards and masts with royal yards would weigh about forty tons. Eighty tons was not much, you might say, but at an angle of nearly 60 deg. of heel, it was only when the ship was relieved of this weight that you realised how much it had affected her. Though the lee rail was submerged the force of the seas breaking on the hatch was not so heavy and I could see we had still a fighting chance. On soundings being taken we found that the securing of the hatch had been successful as the water had not increased. Those who understood the boiler were put on the job of making preparation for raising steam to pump the ship out. Mustering all hands on the poop I fed them with what food we could get, which, as the galley was washed out, was bottled stout and Australian biscuits.

I didn't see my wife for two days although I had news about her and the two children from the apprentices. As our quarters had been completely gutted she managed somehow with the help of the apprentices to get herself and the children up into the charthouse.

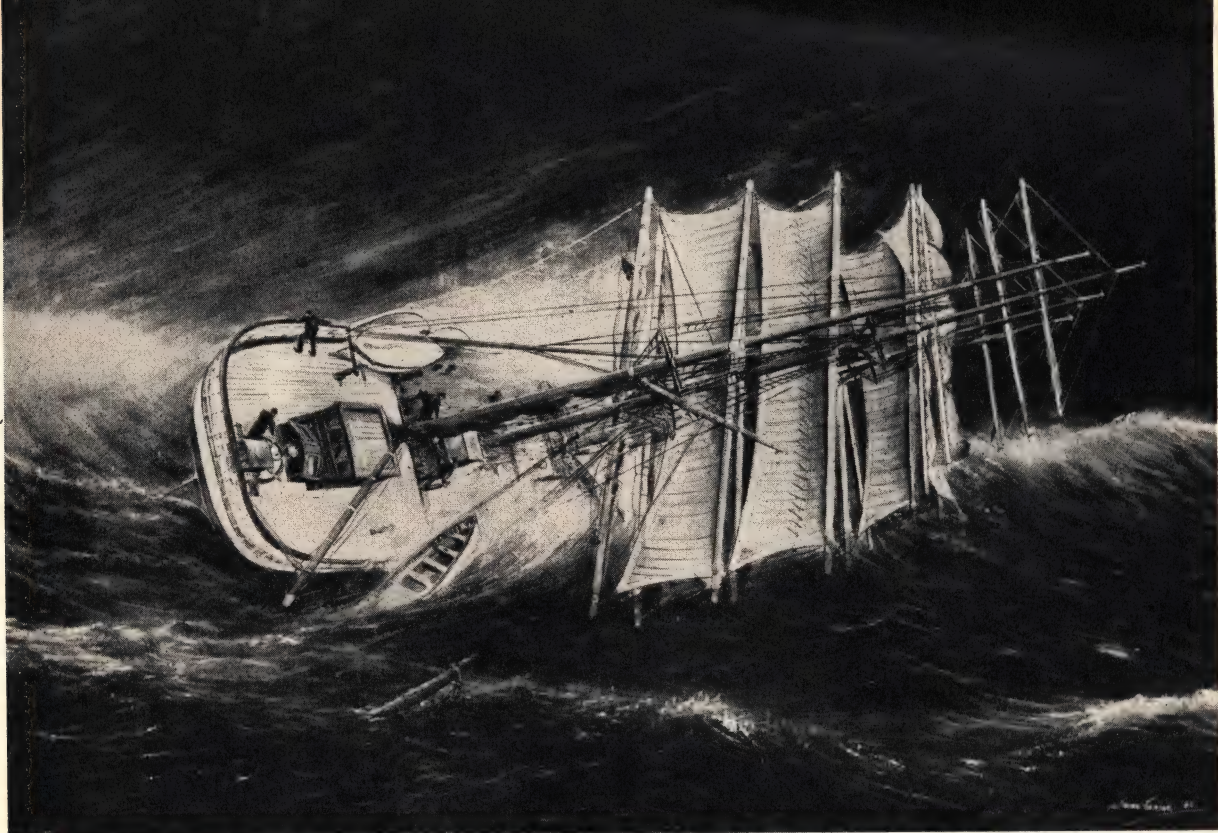
By way of the sail-locker, all hands got into the after hold and started to move the coal over from starboard to port by means of a basket and trolley.

Night and day the trimming went on with only brief stops for food and drink. Once I felt that we were reasonably safe, with the improvement in the weather, I decided that the crew would do better if they had rest. I was afraid of going to sleep myself, so I called for a volunteer to stand with me while the rest had a sleep. Without any hesitation a coloured man, Jeremiah Wilson, stepped forward, and he stood with me. Frank had been a tower of strength throughout all, but now he was dead beat.

With the ship gradually righting herself through pumping and trimming we were faced with a new danger; the broken spars that were hanging over were cutting the lower rigging at every movement and I was afraid that if they sagged further the jagged steel might pierce her under water, which would finish us, so I decided to get clear of them somehow. With the mate I went aloft, which was more a case of crawling than climbing on account of the list. On the lower cap we were over the sea and just at this critical moment my wife came on deck, the first time that she had been able to get out. With an axe I cut the wire brace runner that was holding the wreckage and as soon as I got it half way through the whole lot went. My wife told me that it was very wrong for us two who were so important for the safety of the ship to go on such a dangerous job. She was right, but one doesn't see danger in such circumstances.

Working night and day at trimming the cargo and at the pumps we were gaining ground. I was at both jobs along with the crew, hungry, dirty and sleepy. The passing of days had not meant anything to me but about now I realised that it was five days since the cargo shifted.

Although the wreckage was now clear of the ship, it was, on account of the lee backstays, still attached, but at least eighty feet under water. By means of life-lines we were now able to get down to slip the



The "Bengair" on her beam ends in the Pacific

screws and let it go. By this time we had secured the yards on the foremast and set some sails. At last she was answering to her helm. As Sydney was our nearest port we set course for there.

We made the land one evening at Jervis Bay, about one hundred and twenty miles south of Sydney. The signal station on sighting us evidently reported our condition, for at 8 a.m. next day two salvage tugs were sighted steaming at full speed towards us. The first to reach us was the *Champion*, owned by Messrs. J. and A. Brown, and I planned to have some fun with him seeing he had let me down when we left Newcastle. As it was breakfast-time I sent all hands below to eat, to give the impression that the ship was abandoned, thereby raising his hopes of salvage.

There was very little wind and I was at the wheel sitting on the grating to escape attention. However, just as the *Champion* arrived, my wife sent the steward up with a cup of tea for me and this gave the show away. Then the fun started. When he offered to take me in tow, I told him that before I would even consider talking to him he would have to show me that he had a cook, as he had not been able to tow me out of Newcastle because he hadn't one.

By this time Fenwick's tug *Leveret* had arrived and as they were bitter rivals in business the situation was tense. At first *Champion* was talking salvage but that was short-lived. *Leveret* was now on my starboard quarter and every offer that Brown's made was promptly cut by Fenwick's. I was quite unconcerned about either of them in view of what we had been through in the last week. We were getting the water out of the hold and things cleared up on deck.

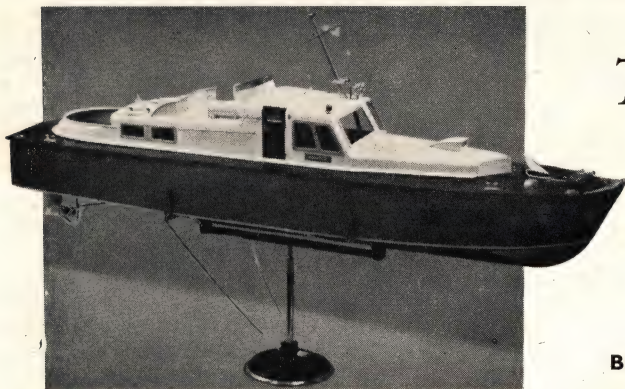
Eventually in desperation Brown's tugmaster shouted, "Remember your ship is on our contract list!" My reply was, "Yes, I know it, and those are the only terms under which I will let you tow me." After a little, he agreed to tow me at contract rates into Sydney harbour.

We were indeed a sorry-looking mess as we entered Sydney Heads, but the ship and her crew were safe, not a man had a scratch. The starboard rail was still under water when we anchored off Garden Island.

After the port doctor granted pratique we were besieged by reporters and others seeking business. I gave the reporters all the information they requested, but the only business that interested me at the moment was ordering fresh food.

From Circular quay I went to my agents, J. and A. Brown, to enter the ship and cable my owners. They were rather stiff and asked me why I had insulted the master of the *Champion* by asking him if he had a cook. I knew the reason, towing the ship that was now news in all the papers a hundred and twenty miles for fifty-eight pounds, a contract rate, instead of salvage. I pretended to be indignant at the idea of my insulting anyone and said that my one concern was the safety of the ship, and seeing that the *Champion* had not been able to tow me to sea because she hadn't a cook, it would have been wrong for me to enter into negotiations with him if he was still without a cook. I then told him to call up Newcastle to confirm my story or otherwise, saying that if I was wrong I would pay for the call and apologise to the master. I never heard any more of this incident.

(To be continued)



The Power Boats at the Exhibition

BY A. D. TROLLOPE

IN these notes last year, I wrote in a tone heavily tinged with pessimism . . . the judges decided that the Championship Cup was to be withheld owing to the absence of any power boat that looked like a Cup winner. My head hanging in shame, I began to think that the counter attractions of TV, radio control, and "pools" had so sapped the constructive urge of the power boat men that we were unlikely to see ever again a really good show of their craft. However, after having taken one hasty look at this year's exhibits I knew with great joy, that I was entirely wrong and that this year it looked as though we were well on the way to seeing, as of old, the power boat section stealing the show.

An entry of 24 boats, the majority of which were very good indeed, 13 awards including the Championship Cup for Steam and Motor Ships, 2 Silver medals, and 3 Bronze medals, all add up to a very good show.

The Championship Cup was won by what can truly be described as the ideal "Club" boat—the sort of boat that you can put in the car and run on any old water and have lots of fun, or take to the club regatta and compete in the steering competitions and possibly also win the Coupe d'Elegance. Entry No. E. 9 *Aquatile* by Mr. H. R. Cook of Ilford, was all of this. She is a shapely, hard chine cabin cruiser built to the M.E. Plan P.B.6. described in *The Model Engineer* of March 13th, 1947. The hull is planked on frames in the normal manner and beautifully finished both outside and in. The superstructure is in light alloy sheet and also finished with a high degree of craftsmanship. *Aquatile* is

powered with a 15 c.c. Seal engine, the popular Westbury four-cylinder job which has proved so very successful. Mr. Cook has here added a further refinement by fitting the engine with a closed circuit cooling system operating on glycol, with a surface cooler fitted to the bottom of the boat. There were only two points that I personally took exception to: the plastic gratings in the aft cockpit and the weird and peculiar design of the stern gear. The design was originally intended to be steam driven, hence the streamlined funnel. There was no suitable petrol engine design available at that time, and it was that fact that decided Mr. Westbury to produce the "Seal" engine.

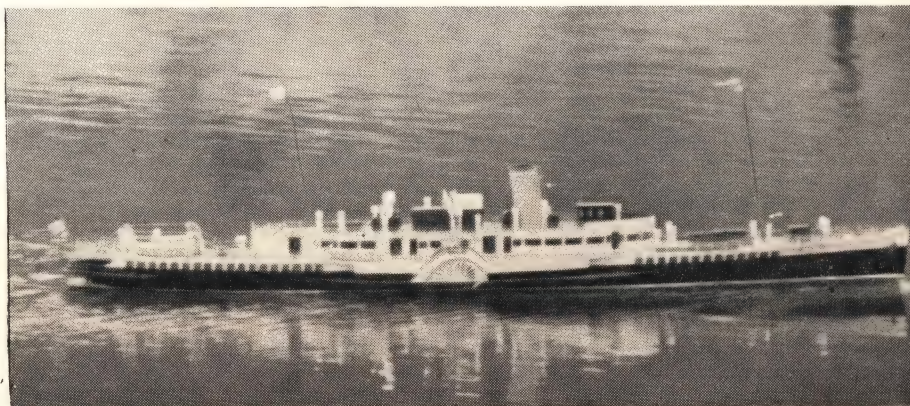
Mr. A. T. Judd of Birmingham (what is it in the Birmingham air that produces such wonderful ship modellers?) very nearly repeated his success of a few years ago when he won the Cup with *Eleftheria*. His entry E.7, a Mersey tug *Yorkgarth* to a scale of 4 mm. to a foot, was a perfect gem, equal in every way to *Eleftheria* and impossible to fault in any way as a piece of craftsmanship. Last year it would have walked away with the Cup, but, this year the opposition was just too strong; but it was a very near thing. It was awarded a Silver medal.

E.3, a radio-controlled police launch *Sir Robert Peel* built by Mr. P. L. Petch of Bromley, was the other winner of a Silver medal. This was a very nicely finished job and though of simple design and obviously lacking a great deal of detail, it was removed from the mediocre by the installation of a very well made twin cylinder i/c engine, the well-known "Seagull" design of E. T. Westbury. This

Heading: Mr. H. R. Cook's model "*Aquatile*" winner of the steamship cup

Right: A cardboard model of the P.S. "*Royal Eagle*" by Mr. K. A. Slade

Opposite page: Mr. A. T. Judd's beautiful model of the Mersey tug "*Yorkgarth*"





boat was an excellent example of how the fitting of a fairly representative power plant, well made and carefully installed, raises the entry from the diploma class to the medal class.

One of the most effective exhibits and one which attracted a great deal of attention and interest was E.6, a steam driven and radio-controlled trawler *Wanderer* built by Mr. W. L. Jennings of Andover to the M.E. Plan P.B.9. It was engined with a very well made twin cylinder d.a. engine of conventional design, neatly and cleanly installed. The hull was well shaped and finished but the general appearance of the model was badly marred by the almost complete absence of any deck details. Many working models are normally kept very clear of small and fragile deck details, owing to the possibility of their receiving damage at the pond side, but it would have been easily possible to include a lot more than was apparent on *Wanderer*. Trawling gear, the odd coil of rope and all the miscellaneous collection of apparent junk that generally covers a trawler's deck, would have given the model a higher rating. It was awarded a Bronze medal and the SHIPS AND SHIP MODELS special prize of £5 5s. od. for the best model built to Percival Marshall plans.

The ubiquitous tug was well represented by another Bronze medal winner, E.8, a half-inch to the foot model named *Dolphin* and built by Mr. J. V. Fallaize of Harrow. This was a real tug in appearance, tough and sturdy as a tug should be, and altogether a very creditable job. It was engined with what, today, is rather a unique type of engine, a single cylinder slide crank engine, which might well have been replaced by a more conventional and effective power plant. Here also the model suffered from the fact that the minor deck details were missing.

The well-known launch of Mr. G. L. Jones of London, *Regina II*, modelled on the lines of a Walton river cruiser, was also awarded a Bronze medal. It is an attractive vessel driven by a single cylinder air cooled engine built, and I believe designed, by Mr. Jones, and is a familiar sight to many at various M.P.B.A. regattas. The model becomes, also, the first winner of the newly instituted Model Power Boat award of £3 3s. od., awarded to the best model of certified performance.

This prize has been offered to encourage entrants to offer definite and concrete evidence that their

models can perform adequately, by means of photographs, a club declaration or actual runs on the tank. It has been done to weed out, if possible, the entrant who puts in an elaborate but untried model. There have been cases in the past where models which appear to be excellent in every respect fail lamentably to perform or even float in the correct manner in the water.

A Very Highly Commended diploma was awarded to *Geebaa III*, the well-known TV star, built and equipped by Mr. H. R. Clayton of Chalfont St. Peter. This model needs no introduction to the many who saw her perform so excellently on the tank. She is an elegant cabin cruiser of simple lines, excellently built and fitted with a complex and highly efficient radio control gear that always appears to function perfectly.

E.18, entered by Mr. K. A. Slade of Rochester, was an electrically-driven model of the G.S.N. *Royal Eagle*. This model was also awarded a Very Highly Commended diploma and was of great interest as it was made entirely of cardboard or rather bristol board, even the paddle wheels being of this somewhat unexpected material. It appears to be perfectly satisfactory, and the model performs in a pleasant and attractive manner on the water.

Another V.H.C. was awarded to E.13, a "diesel" powered cabin cruiser *Suzanne* built by Mr. H. W. Sheere of Cheltenham. *Suzanne* is a well built and finished cabin cruiser of conventional form, with a large amount of interior detail. The cabin and aft cockpit are built as a complete, detachable box unit, which is removed for access to the small i/c engine which is installed below. Though this arrangement is ingenious it does not, in view of the temperamental nature of small engines, seem to be a very satisfactory arrangement. Highly Commended diplomas were awarded to E.14 and E.20 whilst E.24 was awarded a Commended diploma. E.14 is an electrically-driven model of the well-known G.S.N. cruiser *Royal Sovereign* by Mr. C. R. Smith of Southend-on-Sea. By geographical location Mr. Smith would no doubt have excellent chances of inspecting the prototype of his model, which undoubtedly explains the very true-to-type appearance of the model. A little better finish and better details would have put it much higher up the scale... a pity, a good little model that just wasn't good enough. E.20 was a Fairmile M.T.B. built by Mr. C. Pither of Christchurch. It is a nicely finished little boat largely interesting for a neat little 3-cylinder in line i/c engine with which it is powered and of which Mr. Westbury may have more to say in his report. E.20 was a nice clean design by Mr. L. T. Cassanet of Brixton and apparently here the builder's interest lies more in the neat radio control gear with which the launch is fitted, than in the boat itself.

There was of course the usual crop of mysteries—the "why did he do it?" type of model that turns up year after year. Why, for instance, does a man enter a model under this class, "Working steamers. Power driven prototype vessels" to give it its full title... and then not put an engine in it?

Why build a model described as a "modern cargo

vessel" and have a much oversized and very unsuitable engine poking its head up through the after hatchway? . . . Why build a model of the Royal barge and paint it *white*?

These are avoidable errors—we cannot all build hulls with the precision of Norman Ough or engines like Edgar Westbury, but we can all see ships or good photos of them, and there is no excuse for the appalling errors that one so often sees.

The M.E. Plans Service is at the disposal of anyone who wants to make a boat to an approved and tested design, and there is the information and query service of both *The Model Engineer* and SHIPS AND SHIP MODELS to assist in every way short of actually building the boat.

A point that is not, I think, generally realised by many entrants is that entries in this class are judged purely on their merits as boats. Fidelity of appearance to the prototype, hull design and finish, suitability

of engine and layout of engine room, such things as these are the ones that count. The fact that the boat is fitted with a very clever and complicated radio control gear and can go through all the tricks in the book, makes not the slightest difference.

It is time now that we had a separate class and award for radio controlled models, so that they could be judged entirely on their radio merits, irrespective of whether the radio was carried in a boat, a car or an aircraft.

There is just one more award to mention before I close down. The Willis Cup was awarded to a very neat and excellently built Class B hydroplane by Mr. M. de B. Daly of London and the only entry in Class H. This little boat, sorry, hydroplane, is well known at the various racing events and is rapidly climbing to the top of the speed ladder in its class. Let's wish it all the luck possible and hope that next year it will not be quite so lonely in Class H.

"MODEL ENGINEER EXHIBITION" REPORT FOR 1954

No 2.

The Ship Models at the Exhibition

BY "JASON"

HOW pleasant it is to record that both the standard of craftsmanship and the number of ship models were excellent this year. The principle advance seems to be in the radio-controlled working power-boats, nearly half the power boats having this control. As usual, the strongest class was that of the miniature ship models. The workmanship was of a very high standard, quite as good as in previous years, although the exquisite work of Donald McNarry was not on view this year in the competition section. He is now a professional and thus ineligible.

An important addition to the long list of cups and awards is that of the Duke of Edinburgh Challenge Trophy. This is now the principal prize and may only be competed for by previous winners of Championship Cups, Special Cups, Silver or Bronze medals. Among the competitors this year were A. E. Field (Birmingham) with his *Cutty Sark*; F. W. Crudass (S.W.19) with his frigate *Mermaid*; Donald McNarry (Barton on Sea) with his H.M.S. *Prince 1670* (50 ft. to 1 in.); Dr. T. Fletcher (Colne) with his tug *Chieftain*; J. F. Alderson (Cardiff) with his clipper *Norman Court* and J. D. Attwood (Southampton) with his wool clipper *Mary Penhall*. Add to these a number of Engineering Cup winning models and there is a battle of the giants in very truth.

Speaking generally there were still a number of models with poor finish in paintwork. Good paint is not expensive and only a very small quantity is required for even the biggest model. Firms like Reeves offer special paints for the modeller which will enhance many months' work and, what is more important, preserve the scale in the intricate details of a ship model.



Mr. P. A. Rumblelow's model seine and ring net motor fishing boat

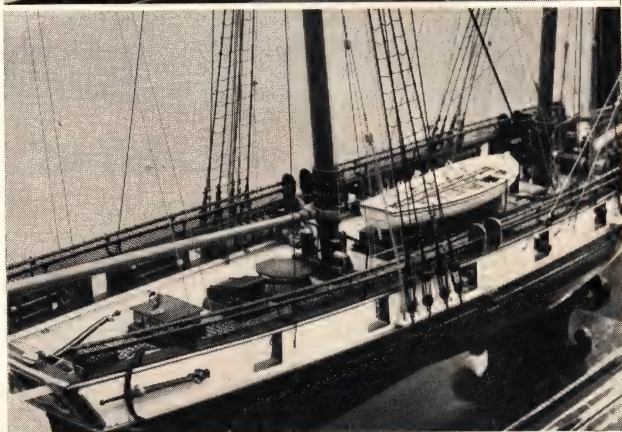
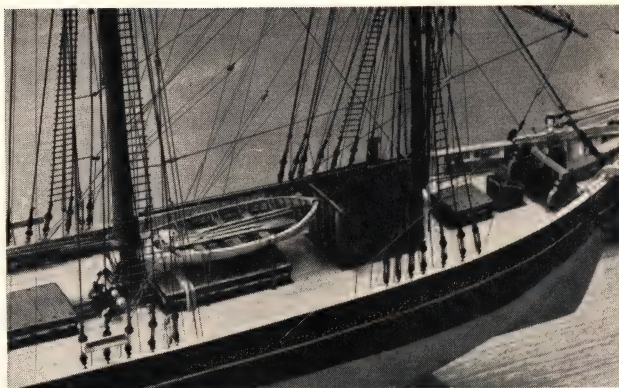
Another beginner's fault has bobbed up again. Some models have white rigging or running gear. Only a few of the luxury yachts used cotton rope. Sisal had not been introduced for use in wind-jammers. Manila was in use generally for running gear for the half century prior to the first world war. Before that for some centuries, hemp was used. Each of these had its own distinctive colour. Cotton rope, new or old, is white. Sisal is light enough to be described as platinum blonde. It does not lose colour very much but does tend to get darker.



Manilla starts off as a bright straw colour but in use becomes a dirty "light oak" shade. Hemp starts off as a dull grey and it alters very little, but parts exposed to the spray tend to bleach. As it is quite easy to make your own rope, the appropriate shade or colour of artificial silk should be purchased and made up to the correct diameter.

The non-working steamers this year were a much better selection than those of the Coronation year. The corvette *Alisma* in dry dock at once caught my eye and I was immediately reminded of Norman Ough's cruiser in a similar setting. Here was a busy scene in a dry dock; stages over the side, stores on the dock side, some packed, some unpacked; patches of rust and patches of paint. I felt, however, that the colouring of the dock side was too light in shade. Had it been darker, it would have acted as a frame and shown up the ship herself to better advantage. A very fine piece of work. A Silver medal was his award this year.

Mr. Rumblelow (Great Yarmouth) is to be congratulated for a fine job in his seine and ring net motor boat. It is robust and it rings true. The model shows a flush decked drifter with a tiny wheel-house aft. Mr. Rumblelow has the secret of self-coloured materials and he has made full use of it. His scale is $\frac{3}{8}$ in. to 1 ft. A judge expects much at this scale



Above, left: a third-rate of 1670 by Mr. H. F. Milne

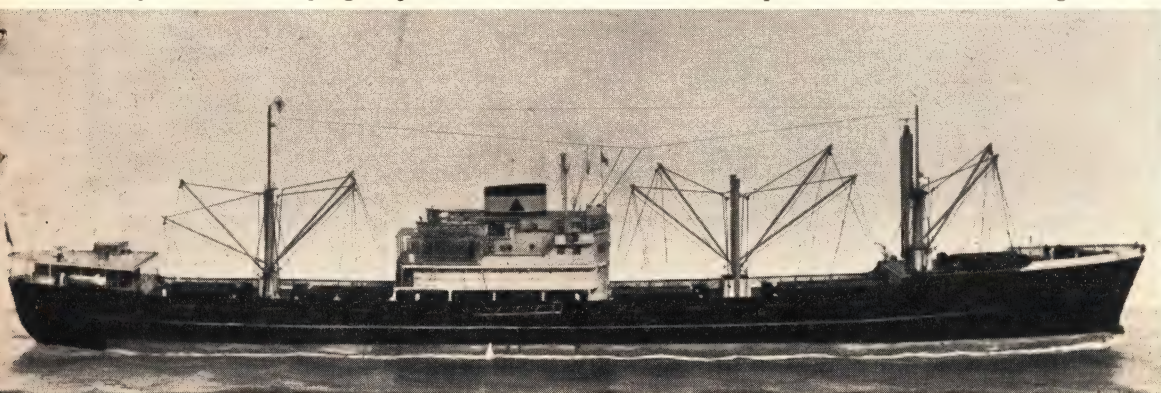
Above, right: Foredeck view of "Waterwitch" by Mr. W. A. Cotton of Handsworth

Above: Deck view of the Cup Winner H.M.S. "Hornet" by Mr. S. A. A. Pariser of Castle Bromwich

Below: Mr. R. Carpenter's fine waterline model of M.V. "Temple Hall." Note subdued sea, slow speed, etc.

and sure enough his eye splices were superb. A Silver medal well earned.

H.M.S. *Dido* (C. 1940) was an imposing job yet it did not stand up to close inspection. Mr. Keevil must improve on finish if he is to get into medal



standard class. His boats were not so good. A boat at the boom is prominent and catches the eye quickly, and for this reason alone it deserves much attention from the maker. Yet I think Mr. Keevil (Warlingham) is heading for high honours.

The U.S.N. *Nautilus*, J. A. Brain (Cardiff) the much publicised atomic-propelled submarine, was a popular exhibit. Mr. Brain used the sectioned-exposure method showing all the interior workings. It was a neat job. This seems to be the only way of modelling a submarine effectively.

Captain Thomson's gas turbine *Auris* was a really fine job with all detail work up to first class miniature standard. She is experimental but the model shows nothing of this. She looks just like any other 12,000 ton tanker with the tiny hatches, the cat walk, and the multitude of valves around the decks. She is a waterline model at a scale of 1/24 in. to 1 ft. The rail work is excellent and this is usually a good test of miniature craftsmanship. So too are the boats. The flags are perfect. The silver medal was well earned. Incidentally this model was in Singapore a few days before the Exhibition opened.

The Championship Cup in the Sailing Ships Section was awarded to H.M.S. *Hornet* (1830) made by F. A. A. Pariser (Birmingham). He worked to the scale of 1/4 in. to 1 ft. His work is quite well known to the regular visitors, his strongest suit being the woodwork and hull. As is usual in his work he exposed some of his framing to show constructional methods. His rigging is extremely neat and well done. Mr. Pariser is up against a difficulty in the interpretation of sail and rigging plans. I can best explain this to novices by taking the well-known double-topsail of a late 19th century clipper or windjammer. When no sails are set the yards are close together and parallel. They would still be like this at sea if the sails were furled or even the upper sail was furled with the lower topsails still set. The method of setting the upper topsail is by hoisting the yard and so stretching the canvas to its limits. The converse is the case when setting the lower topsail, for the yard is in a fixed position and the canvas has to be set by pulling down the lower corners. Now this is one of the simplest items of the complicated system of rigging a ship.

Returning to Mr. Pariser and H.M.S. *Hornet*, his main gaff topsail gear would not readily stand examination. There were no sails on the model but the gear should show a method of setting each sail. There was a tiny head boom slung on a chain bridle with a pair of 3 ft. legs but there was no clear indication of sheet or tack and the leads belonging to these necessary functions. Mr. Pariser has led one rope round and about which might serve as tack, sheet, topping lift, down haul, and other things besides if cut in the right places. All modellers who aspire to the high honours should bear in mind the following points about a sail, whether 3-cornered or 4-cornered there should be a means of holding it securely at each corner not only by a rope but also the rope itself should be so led, by block or fairlead, as to stretch the sail to its utmost and as flat as

possible. It is fairly obvious that this particular gaff-topsail would be set flying. The fact that the head boom was outside the topmast stays at the mast head seems to support this view, and it may be that Mr. Pariser's information is based upon a picture of the sail set in position. This was one of a number of similar queries, but if modellers will bear in mind my suggestions as mentioned above it will help them to achieve better rigging results. Mr. Pariser's standard of craftsmanship is very high and he fully deserved the champion's honours.

Mr. Cotton (Handsworth) won a silver medal for his model of the barquentine *Waterwitch*. This is a popular model and consequently, the work was closely scrutinised. It was a nice clean job and it reflects the spirit of the Birmingham School. His scale was 1/8 in. to 1 ft. The *Raven*, a brigantine, secured a Bronze medal for Mr. Mason (Ilford). Here is an up-and-coming modeller whose work on this occasion was very good. A most interesting model was that of an 18th century trading hoy by J. Moffat (Ipswich). The scale was 1/8 in. to 1 ft. There was obviously a considerable amount of research work.

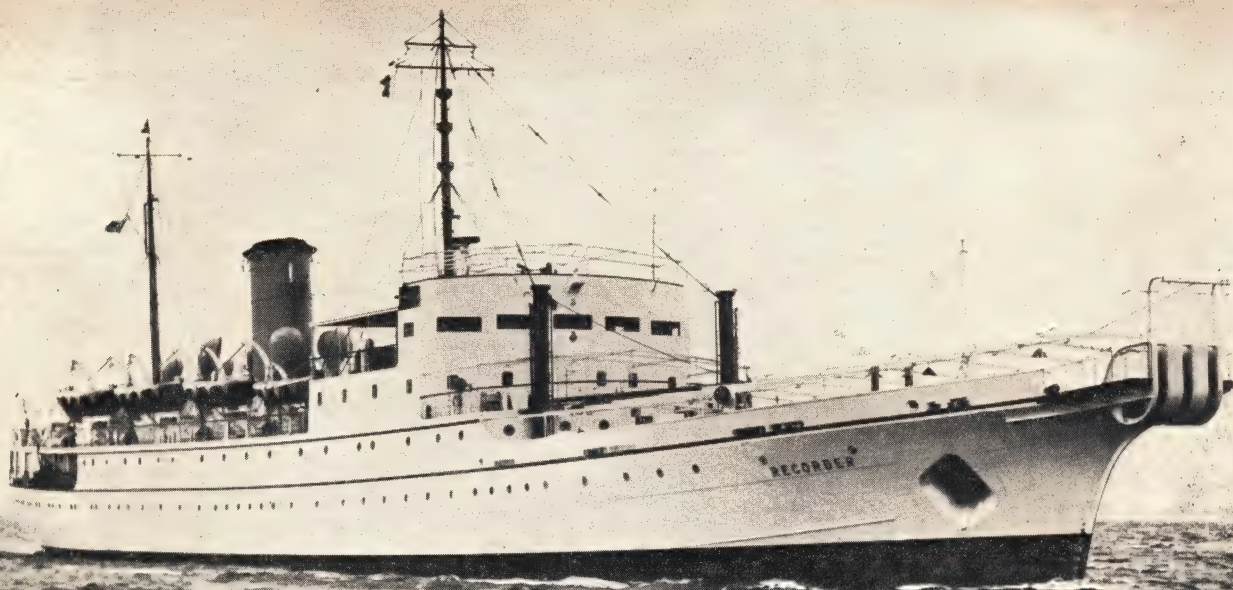
A bamboo raft from Amping, Formosa, was the subject chosen by Mr. Bailey, (N.W.10). This model was fully described by Mr. G. R. G. Worcester in the Wembley Society's "Sheet Anchor" and its faithful portrayal earned a V.H.C. diploma.

There was a very strong and representative class of working ship models including the very nice Brixham trawler *Valerian*, B. J. Haddock (Reading) and a couple of well tested spritsail barges by Messrs J. J. Starkey and H. D. Aldridge (Southend on Sea). I admired very much the robustness and yet wonderfully finished schooner *Valkyrie* by D. C. Eyles (North Finchley). There was also a fine 10 rater *Julia*, by J. E. Storey (E.5). The four latter entries gained Bronze medals.

Now for the miniatures.

The name of Carpenter (Brighton) appears year after year, and his work steadily improves. This year he submitted two entries at a scale of 1/35 in. to 1 ft. An unusual scale but it keeps his model to a convenient length. His "seas" are very subdued and this year one of his models the British India m.v. *Chilka* was awarded the Hampshire Prize in addition to a Silver medal. There is a complete absence of "scale-scattiness" in his work; his colours where used, are very carefully chosen and blended so that the whole forms a picture. In his other entry the m.v. *Temple Hall* of the Ellerman Hall line, he has introduced no less than eight members of the crew loafing or working around the decks. The port anchor is being lowered to the water and the Chief Officer is supervising the operation right up in the bows. A seaman has taken the eye splice of a hauling line out through the fairlead and back on board over the rail ready to bend a heaving line on it. The sea setting is in sympathy. It is obviously the more-or-less quiet muddy water of an estuary. It is just these minor touches which bring the model to life. Each entry gained a Silver medal. A very similar standard

(Continued on page 391)



the new cable repair ship "RECORDER"

BY LAURENCE
DUNN

Photographs in this article by courtesy of Cable and Wireless Ltd.

THE C.S. *Recorder* (3,300 tons gross) is the largest and fastest vessel in Cable & Wireless Ltd.'s fleet of cable repair ships. She is also the first British vessel of her type designed to handle the new deep-sea submarine telegraph cables.

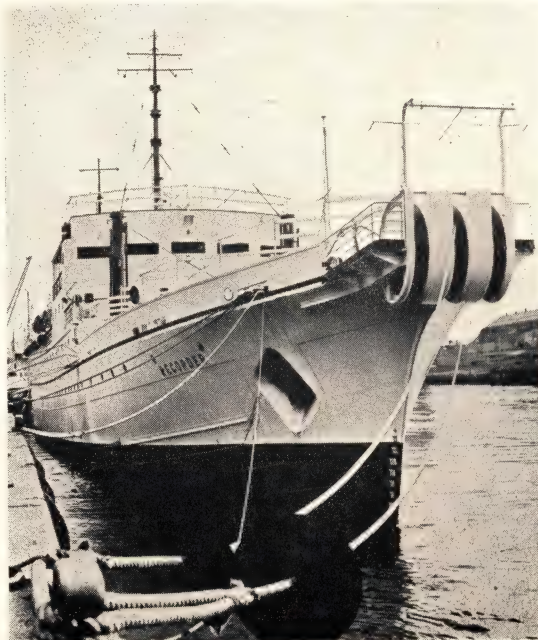
Built on the Tyne by Swan Hunter & Wigham Richardson Ltd., she was launched on May 3rd and handed over on July 28th. After doing one or two jobs in the Mediterranean she will proceed to Singapore, which for the time being will be her station. There the *Recorder* will relieve the C.S. *Stanley Angwin*, which will then be transferred to Gibraltar. The new ship, which replaces the much smaller vessel *Cable Enterprise*—now for sale—therefore carries a Spanish crew, which will transfer to the *Stanley Angwin* on arrival at Singapore. Altogether the *Recorder* will have a complement of 106 officers and men.

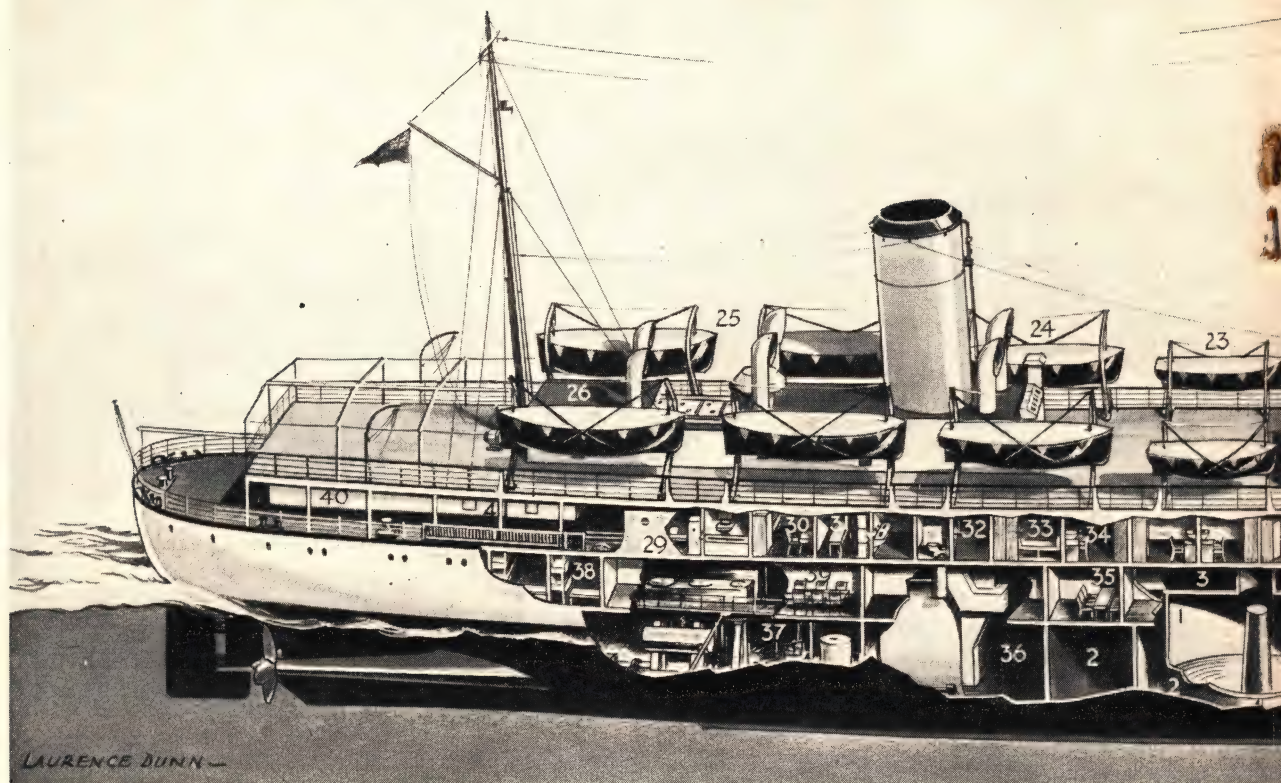
The *Recorder* is capable of working in any depths of water and in any climate in which ocean cables are laid. She has a speed of 12 knots, an endurance of 10,000 miles and can carry 420 miles of deep sea cable. Her operational area will stretch from Colombo, eastwards across the Indian Ocean to Vancouver Island. It includes the world's longest section of submarine cable, which stretches from Bamfield (Vancouver) to Fanning Island, in mid-Pacific, a distance of 3,466 miles. In places this cable lies at a depth of $3\frac{1}{2}$ miles.

The main dimensions of the *Recorder* are : length overall approx. 340 ft. 6 in., breadth moulded 45 ft., depth moulded to upper deck 27 ft. 3 in., and she is designed to carry a deadweight of approximately 2,500 tons on a draught not exceeding 18 ft. 6 in. She has two kingposts forward for handling cable buoys and her three bow sheaves are larger than usual to facilitate the handling of deep-sea submarine telegraph repeaters.

As the sectional drawing shows, the ship has two

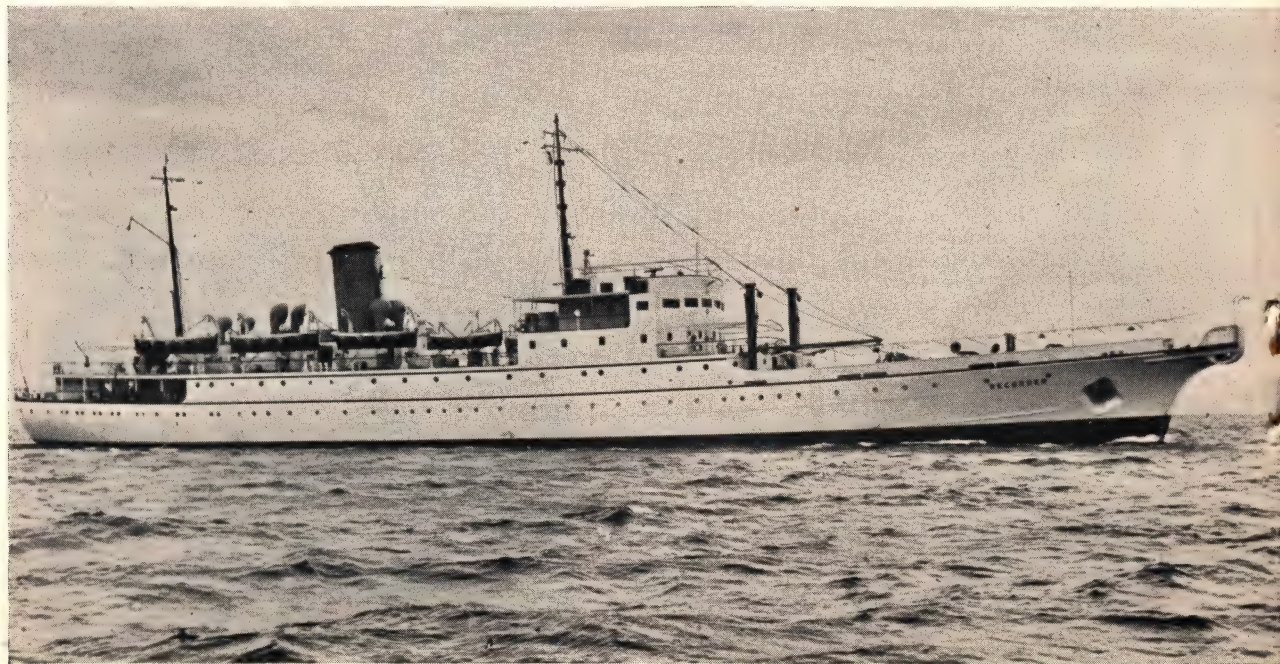
continuous decks and a lower deck forward. The boats are arranged on a long bridge deck and the captain and senior officers have their quarters in a deckhouse on the forward part of this deck. The machinery space is aft, and immediately in front of this are oil fuel tanks,

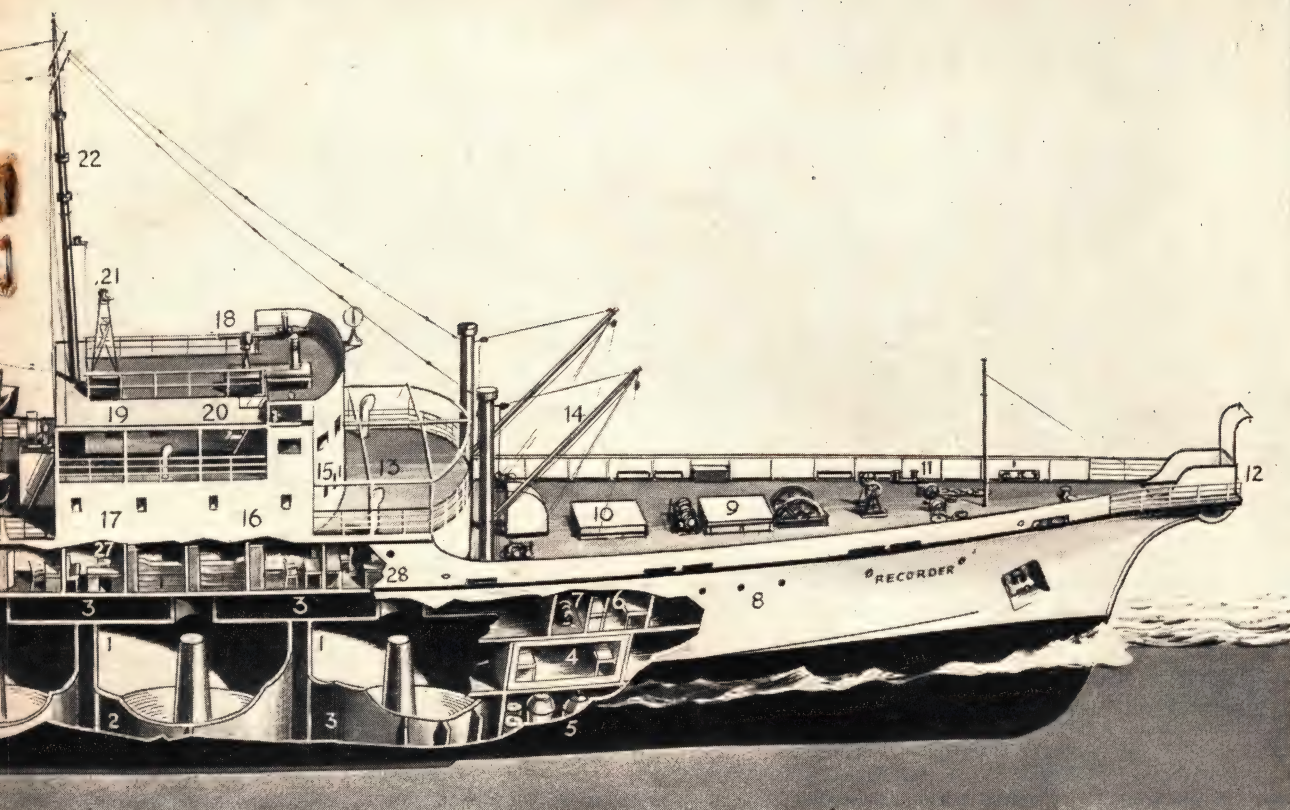




Sectional drawing showing main features of C.S. "Recorder"

Below : C.S. "Recorder" photographed off the Tyne whilst undergoing trials





extending across the ship and at the sides of the after cable tanks. The forward cable tank is flanked by fresh water tanks and store rooms. The three cylindrical cable tanks have a total coiling capacity of 21,000 cu. ft. The forward hold and 'tween decks are arranged for the stowage of buoys and cable gear. Two independent cable gears which are fitted abreast on the main deck forward, work on full boiler pressure and have their controls on the deck above. A special capstan windlass having its engine fitted on the main deck is provided, driving the combined cable lifters and capstan heads.

The *Recorder* is propelled by twin screws and two sets

possible. The ship is also provided with a well equipped workshop, with electrically driven machines, to enable her staff to carry out general maintenance and repairs.

The vessel which is the 23rd cable ship to have been built by Swan Hunter & Wigham Richardson Ltd., is also the third of her type to be named *Recorder*. The first was built for the Eastern Extension, Australasia & China Telegraph Co., in 1885, and was of 1,201 tons. The second *Recorder* (2,276 tons) was built for the Pacific Cable Board in 1901, and was named His Majesty's Cables ship *Iris*. Transferred to Cable &

KEY TO DRAWING OF THE "RECORDER"

- | | | |
|----------------------------|-----------------------------|--------------------------------------|
| 1. Cable tank | 15. Captain's accommodation | 29. Hospital |
| 2. Oil fuel | 16. Chief engineer | 30. Surgeon |
| 3. Rope stowage | 17. Chief officer | 31. Surgery |
| 4. Cold store | 18. Range finder | 32. Oil filling station |
| 5. End of fore hold | 19. Wireless office | 33. Cadets' cabin |
| 6. Joiners' workshop | 20. Chart room | 34. Representative's cabin |
| 7. Refrigerating machinery | 21. Radar | 35. Stewards' mess |
| 8. Cable machinery | 22. Cable lights | 36. Boiler room |
| 9. Drum hatch | 23. 19 ft. working cutter | 37. Engine room |
| 10. Cargo hatch | 24. 25 ft. motor launch | 38. Engine room crew's accommodation |
| 11. Capstans | 25. Four 27 ft. lifeboats | 39. Engine room crew's mess |
| 12. Triple sheaves | 26. Laundry | 40. Crew's lavatories |
| 13. Drying tank | 27. Purser's office | 41. Galleys |
| 14. Two 3-ton derricks | 28. Testing room | |

of triple expansion engines, designed to develop on trial, a total of 2,200 i.h.p. at about 108 r.p.m. These take steam at 220 lb. pressure from two multi-tubular Scotch boilers, which burn oil fuel under forced draught conditions. All the auxiliary machinery is independently driven and the whole of the machinery layout has been designed to make overhaul and maintenance as easy as

possible. The ship is also provided with a well equipped workshop, with electrically driven machines, to enable her staff to carry out general maintenance and repairs.

Unfortunately the new ship, which was to load cable at Greenwich before taking up service, was in collision at the end of August. This necessitated a return to her builder's yard for repairs and a delay of several weeks before she could leave on her maiden voyage.

The "A" Class Sharpie

★ and how to
build her

"K.N."

THE three-ply for the skin and deck *must be resin-bonded*. If made with ordinary cements or casein glue, it will come to pieces in water. Our boat is 71½ in. L.O.A., but owing to the curvature of the sides a sheet of plywood 6 ft. long will prove a little too short, so a sheet 7 ft. long will have to be bought.

In cutting a strip for the first side of the bottom, a little extra width should be allowed for the fitting, so make this about 6½ in. wide and the full length of the board.

When you offer this to the boat, it will be found that if the forward corner of the ply is lodged in the extreme tip of the rabbet forward, and the after end in the transom rabbet, there is a considerable gap between the ply and the rabbet amidships. Tack the plywood in this position on the boat but allow for fitting forward.

Take a pair of dividers and set to ¼ in. more than this gap. Put one leg into the rabbet against the rabbet line, and the other out at right angles on to the ply. Prick all along the backbone at intervals of about 2 in. If a line is run through these spots, it will give you the shape to which the ply has to be cut to fit the rabbet. Before removing the ply from the boat, mark on the ply where the section stations come, as this will help you to replace in position when ready. Remove the ply from the boat, mark your line through the spots with a batten, and cut.

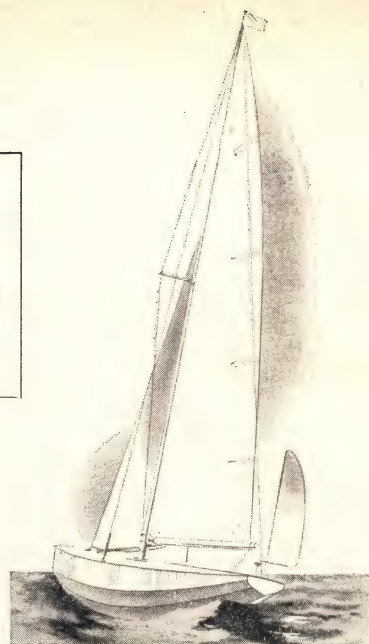
Again offer to the boat and check your fit. This must be adjusted, but little should be required in this respect. Incidentally, our Aerolite glue is a gap-filling glue and will safely fill any gap up to 1/20 in. This is mentioned, not to encourage a slovenly fit, but as a fact that might possibly be useful.

When you are satisfied with the fit along the backbone, tack in place again and run your pencil on the underside round the lower chine, thus getting the shape for the outside edge of the bottom. Cut your ply about ½ in. outside the line. This gives a margin for the final trimming described later.

Before fixing this half of the bottom, turn it over and offer to the other side of the boat. Theoretically, it should be an exact fit. If it is, you can use it as a template to mark out the other side for cutting. If it is almost all right except for a little final fitting along the rabbet, mark and cut just the inner edge, leaving the outer one very full. You then fit the inner edge of this second piece, tack in place, mark the outer edge round the chine, and cut as before ½ in. outside the line.

(Continued from September issue, page 352)

BY
H. B.
TUCKER



The two halves of the bottom are now ready to fix on the boat. The bottom is glued to the keel along the rabbet, to the floors and chine, and of course, into the stem rabbet and to the transom. Spread your resin on the frame members, and then apply hardener to the piece of ply in the appropriate places. Put in position, and tack in place. As you may not have time to get all the fastenings in position before setting starts, begin with the forward end and transom, and then put one in here and there. Do not at first attempt to work steadily from end to end. Pay special attention to any place that tends to lift or does not seem bedded right home. The bottom is fastened to the backbone, stem and transom with small brass screws. It is also screwed to the floors, but is nailed along the chine. As all this takes a considerable time, it is recommended that for the planking at all events, the slowest available hardener is used for the glue. The other half of the bottom is put on in similar fashion.

The procedure for the topsides is a little different. Cut a strip of plywood the full length of your sheet and about 7½ in. wide. Offer this to the boat with the bottom of the ply about ¼ in. below the lowest part of the upper chine. Draw about 2 in. back from the stem rabbet, and tack lightly in position. Cut a strip of cardboard about 2 in. wide with the sides exactly parallel. Put the forward side in the stem rabbet and use the after side as a guide to mark the angle for the forward edge of the skin. After cutting this, again offer to the boat with the forward edge in the rabbet against the rabbet line, and the lowest part of the ply about ¼ in. below the chine as before. Tack in place. Run your pencil along the chine and mark the lower edge for cutting. At the same time mark in the section stations for position.

Remove the ply and cut the lower edge to shape. Now measure on your sheer plan the height from the chine line to the sheer line on each section station and transfer these measurements to the plywood. It will be necessary to cut our side in the first instance a good ¼ in. above the inwale, but make it ⅜ in. to

be on the safe side. So add this to each of the measurements taken for the side. Draw a line with a batten through the spots thus found, and cut the ply accordingly. Check with the boat, and if all seems well, turn the ply over, and offer it to the other side of the boat. Having checked this use the ply as a template to mark and cut the other side.

The skin of the topsides is glued only to stem, transom, inwale and chine, *not* to the moulds. It is screwed to stem and transom, and nailed to inwale and chine. In passing it may be observed that No. 20 copper pins $\frac{3}{8}$ in. long are suitable for nailing the skin, or brass pins of similar size. The brass screws can be $\frac{1}{2}$ in. \times 0.

Be careful not to get any glue on to the moulds. Otherwise, the procedure for gluing and fastening the topsides is just as described for the bottom.

When our glue is set, we can trim down the bottom and topsides to the chines in readiness for putting on our bilge plank. The whole idea was clearly shown in Figs. 8-11. Trim the topsides and bottom down to about $\frac{1}{16}$ in. from the chines. Take a flat piece of wood and wrap glass-paper round it, and holding so as to work on both pieces of ply at once, clean up right down to the chines. By doing both sides at once you ensure a flat surface for the bilge strake to rest on.

K714 "Samoena," owned by Mr. F. Douglas, won her way to seventh place in the recent national regatta at Gosport. She is built to Mr. Guy Blogg's concentric circular section system



Take a strip of the $\frac{1}{8}$ in. thick wood to be used for the bilge strake and offer to the boat. Tack in position while you mark the angle it has to be cut at the forward end to fit the stem rebate. Remove the strip and cut the fore end. Replace the strip with its forward end in the stem rebate and tack in position. With your pencil run along upper and lower chines and mark the wood for cutting. The bilge strake is duplicated as before for the other side of the boat, and glued and fastened in position exactly as the topsides (i.e., it is *not* glued to the moulds but only to the permanent members of the frame).

When the glue is set, the bilge strakes are trimmed down flush with bottom and topsides. The superfluous wood is now cut off at the stern level with the after side of the inner transom.

Our hull is now ready for glass-papery, and must be rubbed down extremely smooth, finishing with "flour" glass-paper. The hard angles on the chines, and also on the stem and cutwater, can be slightly "radiused" down. In other words, these angles can be blunted off a little, while you are rubbing down.

Our rudder-post will be a piece of $\frac{5}{16}$ in. external diameter brass tube and the rudder-tube will be a piece of brass tube that is a comfortable fit over this, since the rudder must be able to move freely without a sign of binding in the tube.

The rudder-tube, which passes through the hull, extends from the heel pintle of the rudder to a point $\frac{1}{8}$ in. above deck. Below the hull, the tube forming the rudder-tube is cut away leaving just a strip which goes down the back of the stern-post (i.e. after edge of skeg).

If these tubes have been purchased, it would be as well to bore the hole through the keel for the rudder-tube, before we take our boat off the moulds. At the same time the stern-post should be slightly grooved to bed the portion (i.e., the strip left) of the rudder-tube below the hull. For making this groove a small rat-tail file is used, and a long shank drill is needed to bore the hole. On the inside of the boat this hole should come out next No. 10 section floor.

Before taking the hull off the moulds tack the hull firmly to No. 6 mould. Drive a panel pin through skin and inwale each side, but be sure to leave enough of the pin to be able to withdraw it with pliers. The reason of this will be explained in due course. By the way, during glass-papery, you should have stopped any holes in the skin with plastic wood. The holes from this last tacking will have to be stopped later on.

Start by taking out the screw holding the stemhead to the building board. Turn the boat right way up, and remove the screws holding the crosspieces to the building board. Remove last those for the transom and section 1.

The building board can now be lifted off the boat. The next step is to remove the moulds. Start from No. 7 and work aft, and No. 5 working forward. The mould for No. 6 can be left for a moment. Since the sides are quite a bit above the inwale, it is now difficult to put ties across the gunwales to prevent the yacht springing out of shape, however, our No. 6 mould will answer this purpose.

Our next job is to trim the gunwales down. It will be remembered that our deck drops inside the planking of the topsides. Take a small slip of the 3 mm. ply which is also being used for the deck. Using this as a gauge, run the pencil along the inside of the gunwale. In marking, rest the slip of ply on the gunwale and the pencil on top. Our remaining mould should present no difficulty.

Cut the skin down to about $\frac{1}{16}$ in. above the line. Take a piece of flat wood about 18 in. long. This will bridge the boat and give a comfortable handhold each side outside the boat. Wrap glass-paper round one end. With the wood resting on both gunwales, clean up sharp to the line, but on no account go below it. A small further reduction may be required when the deck is in place, but it is better than taking off too much, thus leaving an unsightly gap between the sheer and the covering board which goes round the deck edge.

The deck-beams are cut from $\frac{1}{4}$ in. wood. At the ends they are $\frac{1}{4}$ in. deep, and in the middle they are $\frac{1}{4}$ in. plus the amount of rise of the deck camber. In other words the ends are $\frac{1}{4}$ in. square, and the underside is straight. If the underside is cut convex to the curvature, the beams will tend to straighten out, and in so doing, push the boat's sides outward. The tops of the deck beams are all cut to curves of the same radius, so one template serves for the lot. Notches are cut in the inwales to receive the ends of the beams, which are glued and screwed in position. The tops of the beams must be flush with the top of the inwale, so the deck can rest on both. In passing, it may be remarked that cutting the notches must be done at this stage, although it might have been easier before the skin was on, or even before the

inwale was bent on to the moulds. If it had been done earlier, the inwales would not have bent evenly but gone into flats and bumps.

The deck-beams are a very important part of the structure of the hull, as its transverse strength depends on them. In an A-class, they must never be more than about 6 in. apart. In certain places beams are essential so let us first determine these points. These are from forward: (a) Under the forward end of the jib-tack-rack; (b) Under the after end of this fitting and against the kingpost for the radial jib; (c) Under the fore horse, which also serves to stiffen the deck in the way of the forward end of the mast-slide; (d) At the forward end of the hatchway, which also stiffens the deck in the region of the after end of the mast slide; (e) At the after end of the hatchway, which will also serve for the pulleys of the "quick-gybe" lines; (f) Under the main horse; (g) Against the after side of the rudder-tube; (h) Under the vane gear aft.

Intermediate beams must be positioned where these main beams are much more than 6 in. apart. If you are building for radio-control, the beams forward and aft of the hatchway, will be 8 in. or 9 in. apart, so "carlines" must be fitted. These are longitudinal beams under the deck, and should be placed either side of the hatchway. They are $\frac{1}{4}$ in. square and halved into the appropriate deck-beams.

After two or three deck-beams are in place, remove the remaining mould. Of course, with this, as with all the other moulds, you start by prizing off the pieces of wood which tie it to the floor.

Put in the other deck-beams, but leave (g) until the rudder-tube is in place.

(To be continued)

10 hints...

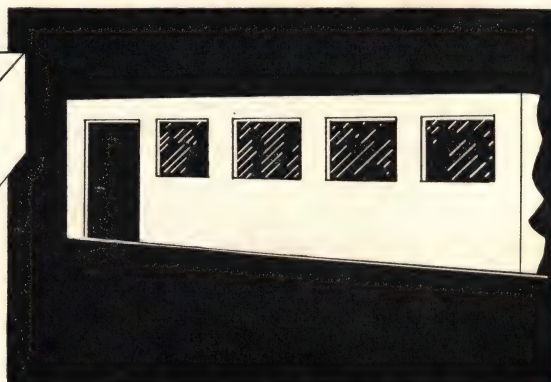
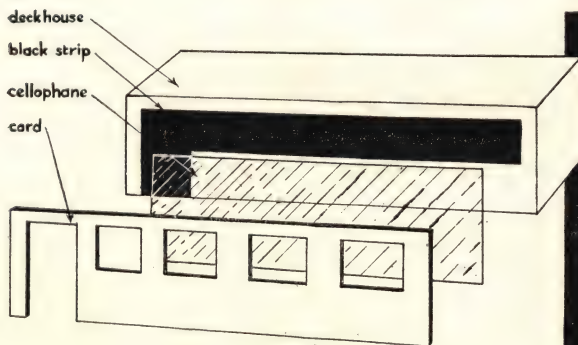
WINDOWS AND PORTS FOR SHIP MODELS

by D. GEMMELL of GORING-BY-SEA

To make effective windows and ports for ship models use the following method:

- (1) Cut a strip of good quality card to cover the deckhouse side exactly.
- (2) Draw on the windows and door lightly in position and cut out with a sharp blade.
- (3) Paint a strip of black or blue grey on side of deckhouse where windows and doors are placed.
- (4) Cut a strip of thin transparent cellophane the width of the deckhouse and stick it over painted strip with transparent adhesive, taking care not to smear the cellophane.

This method may also be used for port holes—holes being made with a small punch.





Naval Photograph Club

BY P. A. VICARY

OUR illustration of the new Seaward Defence Boat *Shalford* shows her lines and armament which consist of a 40 mm. Bofors gun mounted on her fo'c'sle and a three barrelled "Squid" aft which fires a pattern of depth charges forward over the lattice mast. She is powered by twin diesel engines and presents a rather striking appearance with her twin funnels.

H.M.S. *Chivalrous*, recently loaned to the Royal Pakistan Navy, has been renamed by the Begum Choudri, wife of Rear Admiral Choudri, M.B.E., Commander-in-Chief of the R.P.N. Her new name is *Taimur*.

H.M.S. *Highburton* which was launched last June from Messrs J. I. Thornycroft's Southampton, by Mrs. Balding, wife of the manager of the Cunard Steam Ship Co., Southampton, is the first coastal minesweeper to be powered with "Deltic" machinery by Messrs Napier & Son Ltd. She is 152 ft. in length with a beam of 28 ft. 9 in. Her construction incorporates the use of aluminium, both for framing and structural castings, the outer bottom is wood planked. The coastal minesweepers have the latest equipment and can operate sweeps against both contact and influence type mines. The hulls are capable of rapid prefabrication and the diesel engines are standardised to simplify maintenance.

H.M.S. *Undaunted* has been commissioned at Cowes after conversion to a fast frigate, and in conjunction with the fast frigate *Grenville* was guard-ship during Cowes week.

The South African Navy destroyer *Simon Van de Stel*, ex-H.M.S. *Whelp*, has recently visited Portsmouth where she has been carrying out exer-

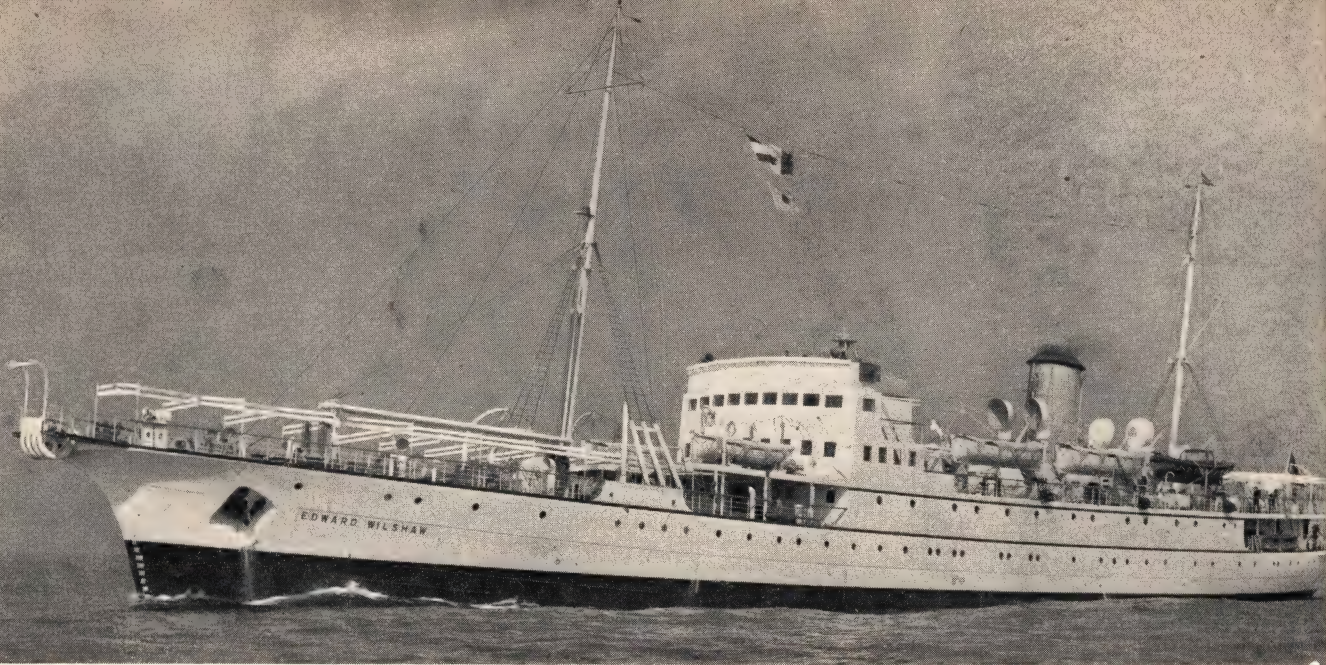
cises in company with ships of the Royal Navy.

Attempts have been made to move the wreck of the French destroyer *Mailie Breze* which was sunk by accident off Greenock in the Clyde in 1940. The Admiralty salvage vessels *Succour* and *Barglow* together with five lifting vessels are engaged on the operation. It is intended to move the vessel into shallow water with a series of tidal lifts. The wires cradling the ship will be attached to the lifting craft and at low water will be hauled taut. As the tide rises the wreck should rise and will gradually be moved shorewards. This operation will be repeated until the wreck is in shallow water so that she can be moved to the breaker's yard. The *Mailie Breze* was sunk by explosion while loading ammunition for the Norwegian campaign and caught fire and sank with the loss of 30 lives.

The frigates *Pukaki* and *Opossum* of the Royal New Zealand Navy and Royal Navy respectively, bombarded and destroyed Communist positions on the west coast of Malaya. On board were more than a hundred Chinese and Malays who had been invited to watch the operation and to see what damage the Navy could do.

H.M. Frigates *Mermaid* and *Peacock* have been paid off into reserve at Portsmouth after serving for over nine years on foreign service. The *Mermaid* was S.N.O. 2nd Frigate Squadron Mediterranean Fleet.

The aircraft carrier *Victorious*, which is undergoing extensive alterations at Portsmouth is expected to be completed in 1956. She was taken in hand in 1950 for thorough modernisation which will include the new angle flight deck.



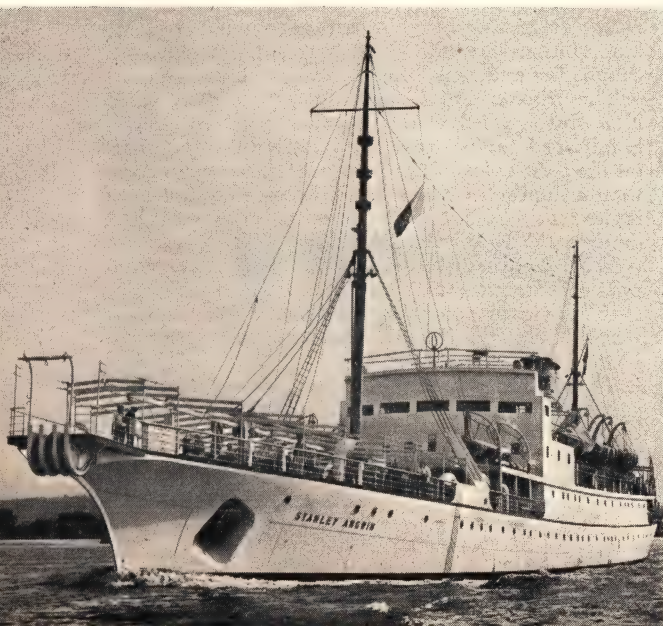
No. 10. CABLE & WIRELESS LTD.

ON April 8th, 1929, the overseas cable and wireless telegraph services operated by some 30 British undertakings were merged into one company, registered in London on that day as Imperial & International Communications Ltd. Five years later the name was changed to Cable & Wireless Ltd. Then, on Nov. 6th, 1946, Royal Assent was given to the Cable & Wireless Act, which provided for the company to be taken into public ownership by the transfer of its shares to the Treasury.

Despite the fact that these shares have passed into

Above : S.S. "Edward Wilshaw" leaving the Tyne in 1949 on steam trials

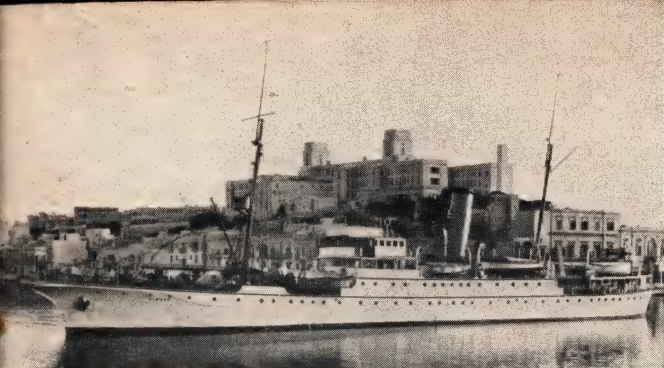
Below : S.S. "Stanley Angwin" steaming down the Thames bound for Singapore



BY LAURENCE DUNN

Government ownership the status of Cable & Wireless Ltd. has not changed, and it remains a limited company, is administered by a board of directors and is subject to the laws of each of the countries in which it operates.

Linking the countries of the British Commonwealth is a network of 150,000 miles of submarine cable. Allied to some 200,000 miles of wireless circuits, it comprises part of the largest telecommunications network in the world. The beginning and end of the British Commonwealth's cable system is at Cable & Wireless Ltd.'s cable station at Porthcurno, near Land's End. The eleven cables which land on that sandy beach there link the United Kingdom with the world, and the cable station there is capable of handling over 2 million words a day. From Porthcurno the system takes two directions. One is eastward, through the Mediterranean and across the Indian Ocean to India, Singapore, Hong Kong, Australia and New Zealand. The other is westward, across the Atlantic, branching north



S.S. "Mirror" at Malta



S.S. "Norseman" at Natal in 1939

through Canada to New Zealand and Australia, and southward to Brazil and Argentina on one side of the South Atlantic, and to South Africa on the other. Both North and South Atlantic branches link in a circle through the West Indies. The South African route extends across the S. Indian ocean to form a third route to Australia.

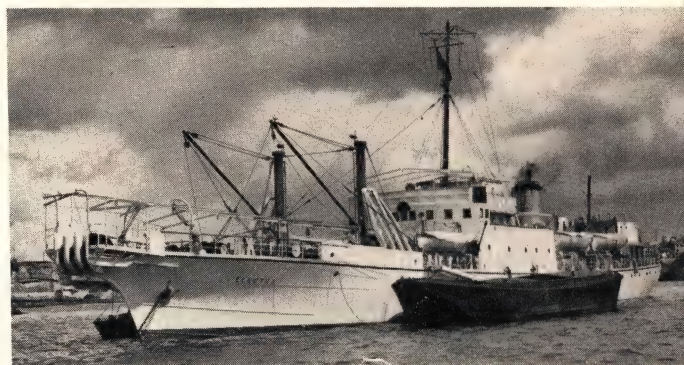
To maintain these submarine cables, through which flow about half of the Commonwealth's communications, Cable & Wireless Ltd. own a fleet of nine cable repair ships. These small vessels with yacht-like lines are designed for easy manoeuvrability and are able to work both inshore as well as in mid ocean. Day and night these ships, which are stationed at strategic points throughout the world, are ready to steam at full speed to the estimated position of any fault that may occur anywhere in the Commonwealth system. With an oil bunker capacity of about 500 tons and ample provision space they can remain at sea for as long as a month at a time.

The present Cable & Wireless fleet consists of the following vessels :

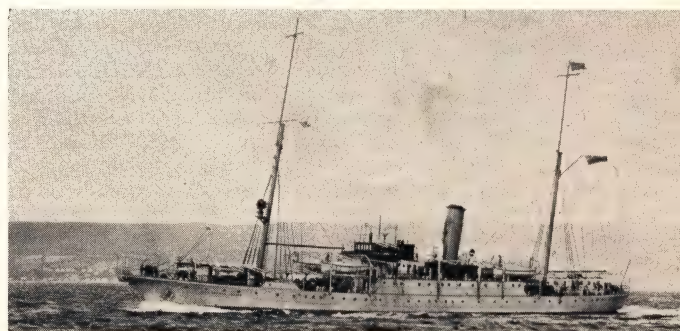
s.s. Recorder	...	Built 1954	3,349	gross tons
s.s. Stanley Angwin	..	1952	2,530	..
s.s. Edward Wilshaw	..	1949	2,522	..
s.s. Electra	... ..	..	1945	1,538 ..
s.s. Retriever	...	..	1944	1,538 ..
s.s. Norseman	...	..	1923	1,892 ..
s.s. Mirror	... ..	..	1923	1,869 ..
s.s. Lady Denison-Pender	... ..	..	1920	1,984 ..
s.s. Cable Enterprise	..	1924	943	..

At the end of August these were stationed as follows : Gibraltar : *Mirror*, St. Lucia : *Electra*, Rio de Janeiro : *Lady Denison-Pender* and *Norseman*, Mombasa : *Ernest Wilshaw*, and Singapore : *Retriever* and *Stanley Angwin*. The newly completed *Recorder* after executing one or two small jobs will proceed to Singapore and be stationed there, replacing the *Stanley Angwin* which will then go to Gibraltar. It will be noticed that one ship, the little *Cable Enterprise* is not included in the above list. She was then lying at Plymouth, awaiting disposal.

The fleet may conveniently be divided into three main groups. Firstly there are the three new ships, which are the only ones to have been specially designed and built for the company. Of these the *Edward Wilshaw* and *Stanley Angwin* are sisters. Then there are the smaller *Electra* and *Retriever*, sisters which were built for the Admiralty and bought from them



S.S. "Electra" loading cable for the West Indies in Plymouth Sound



S.S. "Lady Denison-Pender" 1,984 tons gross built in 1920
(All photographs by courtesy of "Cable & Wireless Ltd.")

in 1947. Finally the four older units, three large and one small, which were acquired through the amalgamation of 1929. Of these the *Lady Denison-Pender* and *Mirror* were built for the Eastern Telegraph Co. Ltd., and the *Norseman* and *Cable Enterprise* for an associated firm, the Western Telegraph Co. Ltd., also of London. The *Mirror* and *Norseman*, which are sisters, are improved and very slightly smaller versions of the *Lady Denison-Pender*.

THE THREE NEW SHIPS

The *Recorder*, like the four previous ships, was built on the Tyne by Swan Hunter & Wigham Richardson

Ltd., and is described more fully on pages 373-375. As regards internal layout she closely follows the design of rather earlier *Edward Wilshaw* and *Stanley Angwin*, but is slightly larger, measuring 340 ft. in length overall \times 45 ft. breadth as compared with their figures of 313 ft. \times 41 ft. All three are fitted with twin screws, triple expansion engines and three Scotch boilers. The *Recorder* has a speed of 12 knots, the others slightly less. Ahead of the machinery space there are three cable tanks in line, and forward again the hold, which is used for the stowage of buoys and cable gear. Each ship has very deep anchor pockets at the bows, to prevent the anchor fouling the telegraph cable when this is being paid out. Above the weather deck is a very long bridge deck, which is extended almost to the stern. In the earlier pair this is 121 ft. in length, but in the *Recorder* this has been continued forward of the bridge, increasing its length by 31 ft.

Although the basic external layout is the same, the design of the *Recorder* includes a number of other modifications: the addition of a pair of kingposts forward, the reversion to a vertical, not sloping bridge front and the placing of all boats aft of the bridge. Finally the more obvious rearrangements of masts and the fitting of a much larger funnel.

ELECTRA AND RETRIEVER

The *Electra* (ex-Bullhead) and *Retriever* (ex-Bullfrog) were two of a group of 1,500 ton cable repair ships which were built by Swan Hunters during the war to Admiralty account, ships in many ways rather similar to a pair named *Aries* and *Iris* which had been built there 1939/40 for the G.P.O. Other ships in this Admiralty series are the *Bullfinch* and *St. Margaret* (still owned by them) and another, which was the last to be finished, the *Bullseye*, which was completed for Trinity House as the *Alert*.

The *Electra* and *Retriever* are both twin screw ships measuring 252 ft. overall length \times 36.4 ft. breadth and fitted with triple expansion engines which give a speed of some 10 knots. They are almost identical in appearance, and as the illustration shows they have a flush deck on which is a short bridge deck—41 ft. in length—placed just forward of amidships. The mast is stepped on this, the forward hatch being served by a pair of kingposts. One boat is carried each side between these and the bridge front, the others being placed aft of this structure. The funnel is very short and has a deep cowl top and is placed midway between the mast and the galley chimney. This rises from the fore end of the after deckhouse and is so tall that it also serves to take the wireless aerials. As built the ships carried a 4 in. gun on top of this house, but this has been replaced by an upper deckhouse.

Both ships were bought by Cable & Wireless Ltd. in 1947 and were reconditioned at the East India Docks, London. The *Electra* was the first to be ready and she sailed from Plymouth to the West Indies on her first commission in May 1948. The *Retriever* left England a little later, in August, her first repair job being the restoration of the Muscat-Karachi cable,

after which she proceeded to her station at Singapore. Both ships carry a crew of about 70 officers and men and their three tanks have a coiling capacity of 10,000 cu. ft. (approximately 200 miles) of cable. This compares with 18,000 cu. ft. for the *Stanley Angwin* and her sister and 21,000 cu. ft. for the *Recorder*.

THE OLDER SHIPS

The three other ships that are in commission are all very similar to one another both in size, capabilities and appearance. The earliest, the *Lady Denison-Pender*, is slightly the largest, measuring 269 ft. in reg. length \times 38 ft. breadth. She was built and engined by the Fairfield S.B. & E. Co. Ltd., and fitted with two sets of triple expansion engines which gave her a speed of 12 knots. She was built for the Eastern Telegraph Co. Ltd., who three years later took delivery of the *Mirror*.

This vessel, which was built further down-river, at the Clydebank yard of John Brown & Co. Ltd., was of similar speed, but 10 ft. shorter and slightly less beam, her dimensions being 259 ft. reg. length \times 37 ft. breadth. The third of this class, the *Norseman* was a repeat of the *Mirror* and came from the same shipyard, but was built for the Western Telegraph Co. Ltd., also of London. Like the post-war vessels these ships have three cable tanks forward of the machinery space.

Basically their external arrangement is very like that of the *Stanley Angwin* and *Edward Wilshaw*. The most obvious differences lie in the much taller masts, which carry fiddled topmasts, the absence of anchor recess and the more open bridge. The bridge deck too, is much shorter, only 84 ft. for the first ship and 89 ft. for the other two, but in the *Mirror* and *Norseman* we see the first move towards the long continuous superstructure of the post-war ships—the creation of a boat deck aft. Although built only three years after the *Lady Denison-Pender*, the *Mirror* and her sister present a much “cleaner” and smarter appearance, largely due to the more “solid” looking bridge with bulwarks below, the fitting of Welin davits, the shortening of the masts and funnel and the placing of the latter further aft.

The last and smallest ship in the fleet, the 943 ton *Cable Enterprise*, inherited from the Western Telegraph Co. Ltd., was built by A. & J. Inglis Ltd., Glasgow, and measures 199 ft. in reg. length \times 30 ft. beam. A single screw, 10½ knot ship with two cable tanks, she has the same type of clipper bow with sheaves and a cruiser stern. In appearance she generally resembles the *Electra* class, but has two masts and a rather taller funnel, which however lacks a cowl top. One boat is carried each side between the foremast and bridge, one on the bridge, which is 40 ft. in length and placed dead amidships, and a last boat on deck abreast the stern deckhouse.

The yacht-like appearance of these ships is emphasised by their spotless appearance and attractive colour scheme. All the vessels owned by Cable & Wireless Ltd., have white painted topsides and superstructure, red-brown boot-topping, dark green ribbon, buff funnel and tan coloured masts.

news from the clubs...



MODEL YACHTING ASSOCIATION

The following open fixtures have been notified:—

Date	Class	Event	Start
October 10	Eastbourne	Eastbourne Cup.	
	10 Raters		
October 3	Eastbourne	Chamber of Commerce Trophy.	
October 3	Bury	Clarence Cup.	
October 31	Clapham	Festival Cup.	
	"M" Class		
October 17	Kensington	Fuller Cup.	

Further details may be obtained from Hon. Racing Secretary:
M. FAIRBROTHER, 1221, Pershore Road, Sturichley, Birmingham, 30.

Y.M. 6-m. O.A. AND SOUTH LONDON M.Y.C.

The following events have been arranged:—

Date	Class	Event	Start
October 3	A	Nairn Cup (Joint Cup Championship)	10.30
October 10	M	Team Race v. Southend, M.Y.C.	10.30
October 17	A	Handicap Race	2.00
October 24	A	Essel Cup (Consolation Trophy)	1.00
October 30	36"	Club Race	2.30

Sailing water, The Rick Pond, Home Park, Hampton Court.
Hon. Secretary: N. D. HATFIELD, 132, Westbourne Grove, West-cliff-on-Sea, Essex.

ELDERPARK MODEL YACHT CLUB, GLASGOW

The following events have been arranged:—

October 2	League Race	6m
October 9	League Race	"M"
October 16	Walker Cup at 2.30 p.m.	6m
October 23	League Race	"M"
October 30	Resails, etc.	

All League Races will start at 3.0 p.m. prompt.
Sailing Waters, Elderpark Pond.
Hon. Secretary: W. J. ALLAN, 26, Drumoyne Place, Glasgow, S.W.1.

CLYDE SHIPLOVERS AND MODEL MAKERS' SOCIETY

The following fixtures have been arranged for October:—

October 11—"The Campaign of the Armada," Illustrated talk by Rev. Leslie P. Hope. Meeting at Kelvingrove Art Galleries. Visitors cordially invited.

October 25—Club Night, "Port Traffic." Talk by Messrs. Wm. Work and C. McCreary. Meeting at Inst. of Engineers and Ship-builders. Members and prospective members only.

Further details from DAVID J. CALDERWOOD, C.A., 89, Gibson Street, Hillhead, Glasgow, W.2.

HOVE AND BRIGHTON MODEL YACHT CLUB

The following events will take place in October:—

October 3	Fourth Club Championship Race	"M"
October 10	Fourth Club Championship Race	10-R
October 17	Valkyrie Cup (Limited Entry)	"M"
October 24	Fourth Club Championship Race	36-in.
October 31	Countess of Caernarvon Trophy	10-R

Sailing water—The Lagoon, Kingsway, Hove.
Hon. General Secretary: F. JENNINGS, c/o, Ardingly College, Haywards Heath, Sussex.

BRISTOL SHIP MODEL CLUB

The October meeting of this society will be held on Tuesday, the 12th at the British Legion Headquarters, Portland Square at 7.0 p.m. when Mr. E. Bowness, the founder of the club, will speak on "Building a Ship." The talk will be illustrated. Further particulars from the Hon. Secretary: A. RALLS, 8, Kenmore Crescent, Filton, Bristol. Tel.: Filton 2448.

THAMES SHIPLOVERS SOCIETY

The Model Makers' meeting will be held on Friday, October 10th at the East Holborn Library commencing at 7 p.m. the subject under discussion being the recent "M.E." Exhibition. It is hoped that judges in the Maritime section will take part. The meeting at the Baltic Exchange will take place on Friday the 29th at 6.30 p.m., when the speaker will be Vice Admiral Sir Wm. G. Andrews, K.B.E., C.B., D.S.O., President Royal Naval College, and the subject, "Personal Reminiscences as Deputy Director of N.A.T.O. Forces." Hon. Secretary: H. V. EVANS, 134, Sunningfields Road, Hendon, London, N.W.4.

WEMBLEY SHIP MODEL SOCIETY

At the Bonhomie Tennis Club at 7.45 p.m. on October 11th, Mr. A. D. Trollope will give a talk on "Deck Fittings for Model Ships." On October 25th, there will be a Club Night.

Hon. Secretary: EWART C. FREESTON, 41, Daryngton Drive, Greenford, Middlesex.



An attractive model tug designed and built by Leonard L. Foote of Huddersfield.

TYNESIDE SOCIETY OF MODEL AND EXPERIMENTAL ENGINEERS

The 1954 exhibition of this society will be held in The Chronicle Hall, Newcastle-upon-Tyne from October 11th to October 23rd inclusive. There will be the usual extensive variety of ships, locomotives and other models on view. Full particulars from E. L. LAMB, Exhibition Manager, Hill Crest, Cheviot View, Ponteland, Newcastle-upon-Tyne.

HAMMERSMITH SHIP MODEL SOCIETY

The meetings for October will be as follows:—

October 5th. Club Night.
October 18th. Lecture, "Sailor Policemen of London's River." by Tom Fallon, Small Hall, Town Hall, W.6, at 7.30 p.m.
October 19th. President's Night.—Lt. Comm. J. H. Craine will open the society's first meeting at their new H.Q. "Westcott Lodge," Lower Hall, W.6, with a talk on the "M.E." Exhibition at 7.30 p.m.
Hon. Secretary: D. L. BENDALL, 20, Ballingdon Road, Clapham, S.W.11.

IPSWICH NAUTICAL RESEARCH SOCIETY

On September 5th a coach party of members and their friends went for a sail in the wherry *Albion*, by invitation of the Norfolk Wherry Trust. The party joined the vessel at Wroxham and, after a description of the features and rig of the wherry, the passage began. On September 15th, the society had an enjoyable informal meeting at a member's home, examining a large collection of ship models and marine pictures.

The first meeting of the winter season will be held at Diocesan House, Tower Street, Ipswich, at 7.30 p.m. on Thursday, October 28th. After the A.G.M., Mr. G. R. Clark will give a talk entitled "Norfolk Maritime Miscellany." Equipment laid on at the speaker's request includes a gramophone!

Hon. Secretary: H. W. MOFFAT, 8, Parkside Avenue, Ipswich.

RADIO CONTROL NOTES

A series of articles for the modeller with an interest
in remote control of his craft

By G. SOMMERHOFF

THE writer has always held that, apart from reliability, the greatest virtue of amateur radio control equipment is simplicity. In choosing material for this column he has never let this aim out of sight. It is this very challenge of greater simplicity that puts the modeller's ingenuity and originality to the noblest test. And certainly one of the greatest thrills that awaits the patient experi-

menter is if he finally succeeds in doing with two valves, relays, reeds, or what have you, what everybody else can only do with three. What a blessing it is that in this country the average modeller's limited financial resources make this virtue a necessity!

In the first part of this month's notes I want to discuss a gadget which is very much in keeping with these opening remarks and which has gained rapid popularity in the United States. This is the so-called "compound escapement" or (after the man who pioneered it) the "Bonner escapement." "Three controls for the price of one!" the enthusiasts claim.

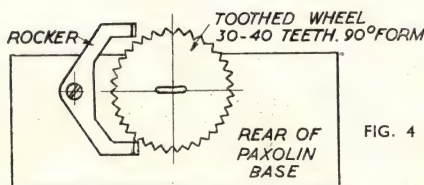
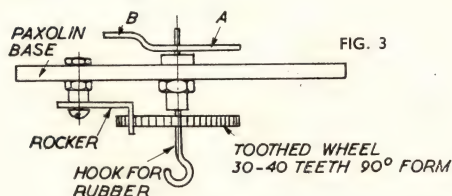
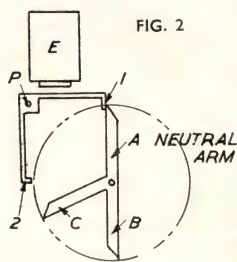
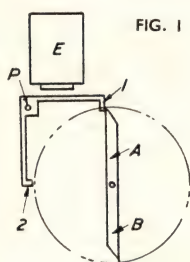
And to give a complete contrast to this I shall devote the second part to an illustration of the type of really professional and luxurious equipment which American industry offers to those who are prepared to spend £50 or £60 on their radio equipment alone.

COMPOUND ESCAPEMENTS

The principle of the compound escapement is best understood with reference to a standard two-position rubber-driven escapement as illustrated in Fig. 1. Here a two-armed, rubber-tensioned starwheel with arms A and B is held by the claw 1 of an armature which is pivoted at P. When the electromagnet E is energised the armature is pulled in, the arm A is released and after a quarter turn is caught by the claw 2. Here it is held until the magnet is de-energised. The starwheel then does another quarter turn, when arm B is caught by claw 1, etc. In the normal application of this escapement to a rudder the starwheel is linked with a crank which gives right or left rudder when either arm A or B is held by claw 2 and neutral when either of them is held by claw 1. There are therefore two neutral positions and the operator has to remember in which of these two neutral positions the escapement is at any given time.

The first step in the transition to a compound escapement of the Bonner type is made by raising the arm B so that it misses claw 1 and by broadening the claw 2 so that it can catch B nevertheless. We now have an escapement with only one neutral position, viz., when A is held by claw 1. When a signal is given and the armature pulls in, A is caught and held by claw 2 until the signal ceases; when this happens the starwheel will turn until A is again caught by claw 1 and the original neutral position is thus restored.

The next step is to slow down the speed of rotation of the starwheel to such a degree that when arm A is released by claw 2 at the end of the signal, and the starwheel is on its way back to neutral, we can catch the arm B with claw 2 by quickly giving another signal and thus pulling in the armature. Catching arm B "on the hop," as it were. This controlled speed is accomplished by means of a toothed wheel and a steel rocker mounted at the back of the escapement (Figs. 3 and 4). The toothed wheel has between 30 and 40 teeth in 90 deg. formation. The speed resulting from this rocker arrangement can be varied by



adding solder to the arms of the rocker, thus varying its moment of inertia.

In practice it has been found possible to add a third arm (arm C in Fig. 2). When this is caught by claw 2 the position of the starwheel is nearly neutral but not quite. If a suitable contact arrangement is fitted to the escapement this extra position can be used for making an electric circuit which gives engine speed control. This is done on the commercial Bonner escapement.

What we have achieved now is this : in the neutral position arm A is held by claw 1. One signal causes arm A to move claw 2, where it is held until the signal ceases. Two signals cause arm B to move to claw 2 where it is held until the latest signal ceases ; and three signals from the neutral position cause arm C to move to claw 2 where again it is held until the last signal ceases. Thus either right rudder or left rudder or engine control can be selected at will and as often as desired without any mental effort and without any danger of anything going out of synchronisation. And at the end of each control operation the escapement automatically returns to its single neutral position.

Although it is not too critical the speed of the starwheel must be correct to give satisfactory results. If it is too fast we shall be unable to catch arm B or C on the hop. And if it is too slow there is a danger of the third signal arriving before the second has

been able to take effect. About $\frac{1}{4}$ second per revolution is said to be an appropriate value.

RADIO CONTROL DE LUXE

I am greatly indebted to the Babcock Radio Engineering Inc. of Van Nuys, California, for their kind permission to put before my readers a detailed and interesting example of the type of luxurious equipment which is available to those American modellers who can afford it. It is particularly interesting because it represents an attempt to supply the modeller with equipment which is built to the same standards as the more simple forms of military radio control gear.

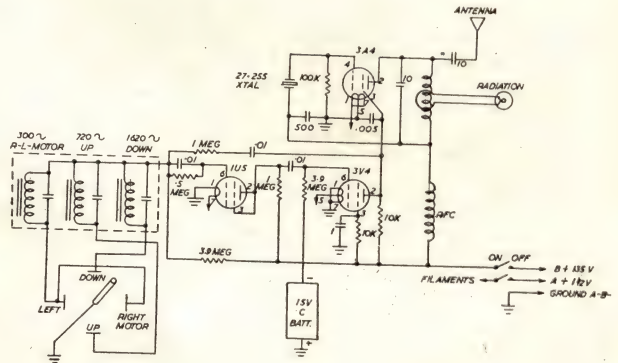


Fig. 6. Diagram of transmitter

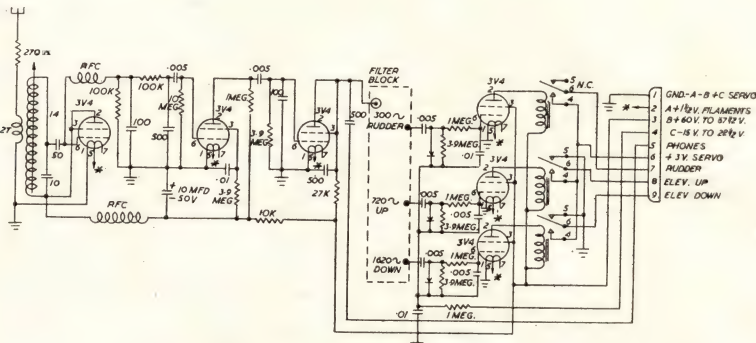
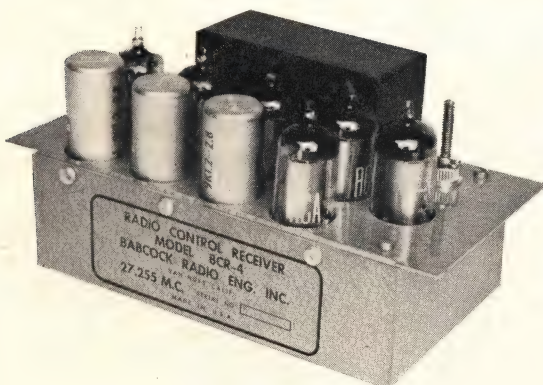


Fig. 5. Diagram of receiver

*Below : Photograph
of completed receiver*



The transmitter is hand held, has a 3-ft. whip aerial and a 4-position control stick. The frequency is 27.255 Mc. Figs. 5 and 6 give the wiring diagram of the receiver and transmitter respectively, and our photograph shows the 6-valve receiver.

The radio experts amongst our readers will find much in these details to interest and stimulate them.

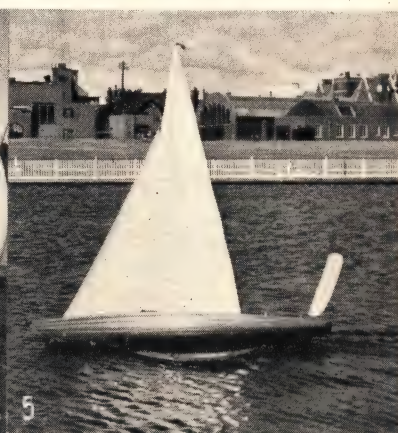
We regret that owing to pressure of contents we have been forced to hold over this month's instalment of "Building a 50 Gun Ship" until the November issue.

BRITISH (M.Y.A.) OPEN "A" CLASS

BY C. R. SEABROOKE

With 32 starters it was decided to sail a full tournament but in order to give skippers some time off, the fleet was divided into two sections, A & B, each of 16 boats. The skipper of Arabesque, J. Anderton, lost the toss to Peter West, who decided to put "A" fleet in to sail first. Monday morning opened with a steady downpour of rain and very little wind as Mrs. W. G. Baker started the first pair off in the absence of the Mayor of Gosport. Only two heats were sailed before lunch. At 2 o'clock, "B" fleet commenced their schedule with a nice sailing breeze from the NW. and seven heats were completed by 6.50 p.m.

Tuesday saw "B" fleet again sailing with a strong wind, most yachts being under second suits and five heats were completed by lunch time. In the afternoon "A" fleet resumed with almost a gale and, sailing till just after 7.30 p.m., completed seven heats. On Wednesday morning a start was made at 9 a.m., in fine sunny weather with a nice full suit breeze from the west and the remaining six heats were completed by 12 o'clock. At 1.30 p.m., "B" fleet took the water to complete their remaining three heats. A break for tea and then the whole fleet of 32 boats faced the starter for the second leg of the full tournament. Two heats were sailed in ideal weather and at this stage about six boats had passed the 50 points mark and the competition was on in earnest. On Thursday morning a start was made at 9.15 in drizzling rain and a fair sailing breeze, giving almost a reach both ways, the wind now coming from the south. Three heats were completed before lunch. Resuming at 1.30 p.m., the breeze gradually lightened as it swung round to the west, only two heats were sailed and an early



CHAMPIONSHIP AT GOSPORT ————— AUGUST 9th—14th

finish at about 5 p.m. enabled skippers, mates and officials to prepare for the dinner at the Lee Tower, Lee-on-Solent. Some 80 people sat down to an excellent dinner at which the Mayor, Councillor Eales, presided, together with the Mayoress and their daughter. An enjoyable and very sociable evening ended with everyone on the best of terms. Friday morning's racing started at 10 o'clock with a strong wind from the west and in bright sunshine the yachts made a grand picture with spinnakers set and many boats really planing along at great speed. Naiad and the new yacht Samoena were outstanding down wind and with skippers on their toes and getting splendid trims, it was not surprising that boards were decided by inches only. Three heats were sailed before lunch. Resuming again after lunch one of the leading boats, Moonraker, dropped a very valuable three points to York, one of the bottom boats, and this was to have far-reaching effects. Two heats were completed, leaving four heats to be sailed on the last day—Saturday. At the end of the day, it was found that any of about six boats could win, with Moonraker leading slightly from Revanche.

With very light NW. wind, a start was made on Saturday morning at 10 a.m. the boats only just sailing on a lake almost like a mirror. With tension rising it was a great trial to the skippers of the leading boats. Revanche was disqualified and so lost three vital points.

At 2.30 p.m. two heats were yet to be sailed and it was found that Moonraker held her very slight lead over Revanche. Both boats collected a further five points. In the very last heat Moonraker beat Fantasy on the run and Revanche easily beat York to leeward. At this last board Moonraker

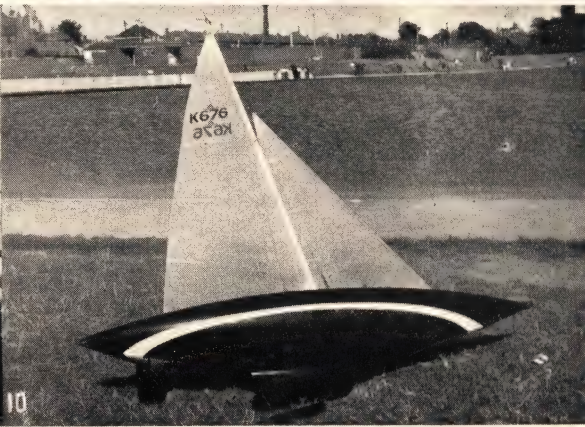
was but one point ahead of Revanche. In the beat back, Moonraker, starting from lee berth, weathered Fantasy and obtained a very useful lead, but running up to the weather bank and in spite of a smart retrim by her mate, was narrowly beaten by Fantasy, which had gone through in one leg. Moonraker was still one point ahead. Revanche had the weather berth against York and made no mistake to win the beat and thus won the British Championship by two points.

History was thus repeated as in 1951, the Turner-designed boat Helios was second to Revanche at Fleetwood. Of the new yachts on view, none showed better than Roberta, the Priest-designed yacht and the Andrew-designed Red Sabre. Both yachts were most ably handled and more will be heard of them in the future. The closeness of the results again proves that strict officership is necessary so that no yacht wins—or loses—through a bad or wrong decision.

Final results:—

No.	Name	Points
D22	Revanche	114
676	Moonraker	112
707	Roberta	107
712	Jullanar	102
679	Vanity Fair	101
704	Red Sabre	100
714	Samoena	99
671	Arabesque	93½
530	Scamp	93
649	Scheherazade	92

1. The Championship winner Kai Ipsen of Denmark with his full-keel yacht *Revanche*
2. An interested crowd inspecting *Tinker Bell*. Amongst others will be seen M. Fairbrother (O.O.D.), C. R. Seabrooke (chairman M.Y.A.), W. G. Baker (hon. sec. Gosport M.Y.C.) and W. J. T. Williams (chairman, Gosport M.Y.C.).
3. *Roberta* beating to windward.
4. D. Lippett and his Mate making adjustments on *Roberta*.
5. *Revanche* going well. Note the clean wave formation.
6. H. Boussy, the French entrant with his yacht *Janine*.
7. B. Priest and his new yacht *Chivalry* with J. Edwards looking on.
8. *Jullanar* and her owner L. Davis.
9. Kai Ipsen starting *Revanche* on a run with spinnaker set.
10. *Moonraker*, owner P. West, missed winning the championship by only two points.
11. *Vanity Fair*, owner J. Meir, running neck and neck with *Roberta*.



● Letters of general interest on maritime matters are welcomed. A nom-de-plume may be used if desired, but the name and address of the sender must accompany the letter. The Editor does not accept responsibility for the views expressed by correspondents

M-CLASS DESIGN "STARDUST"

In this design published in your August issue, although the bow is to the left in both sheer and waterline plans, the forward sections are to the right of the centre-line in the body plan, while on the displacement curve, the words "aft" and "forward" have apparently been reversed.

This design has a deep immersed forefoot, a feature which has not proved successful on other recent designs, as boats with it tend to bury their noses, especially when running in a strong wind. Some designers, who indulge in similar bows, make special efforts to introduce reserve buoyancy in the forward topsides to counteract this tendency, but *Stardust* is remarkably lean forward above water. This results in an unbalanced hull which, as her designer observes, will make her gripe.

Now, there once was a bank clerk, who owed money to his bookmaker. To pay the bookie, he robbed the bank. To cover his defalcations at the bank, he broke open his mother-in-law's cashbox. To replenish his mother-in-law's cashbox. . . .

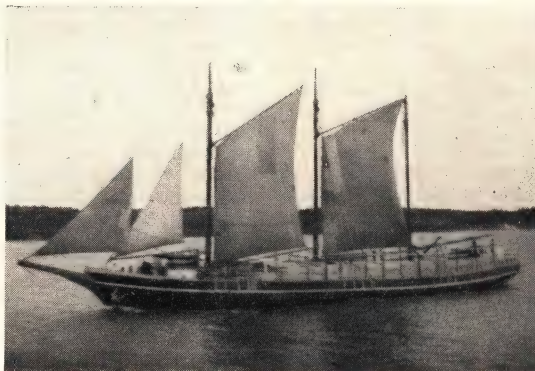
Designers who try to offset a steering fault inherent in their lines by introducing other vices remind me of the bank clerk whose history is referred to above, and in *Stardust* the fault could have been cured by filling out the forward topsides a trifle or fining the after topsides somewhat. Yet even so Mr. Witty has me entirely beaten when he details what he has done to offset bad balance in his design.

He explains that to offset her tendency to run up into the wind, he has given her a normal fin, and placed her skeg and rudder in the most effective position. The former has no steering effect at all, nor has the latter, other than making the rudder function well. His third measure is to give the boat a "gradual" run, which again has no steering effect. As far as I can see, we are left, as we were, with an unbalanced boat that gripes.

I cannot agree with Mr. Witty's dictum that the M-class needs a fine bow to get to windward in choppy water. Nobody can assert that the well-known "Ducks" have fine bows. Yet in the National Championship at Poole at Whitsun, in the two days divisional sailing which preceded the finals, *Jemima Duck* headed one division, and *Hopalong* tied for 1st place in the other, in very strong winds and heavy seas. In such conditions, they were most impressive threshing to windward. In the Finals, held in light wind and calm water, they finished a good 2nd and 4th respectively.

But bluff bows or fine bows, give me a balanced design every time. It must be remembered that a model yacht is a pure displacement type, and has no human ballast to alter her trim. Hence hull balance is pre-eminently important. London.

"OLD HAND."



Schooner "Oma" of Raumo

THE PASSING OF SAIL IN RAUMO

The port of Raumo in Finland has always been a great centre for sailing ships, both square riggers and schooners. As recently as 1927, there were no less than 18 fair-sized windjammers sailing out of the port. Today, only five auxiliary schooners remain and of these three of them were sold recently to other owners in Finland. These three vessels are all three-masted and their names are *Ella*, *Elna* and *Omar*. *Ella* is a fine husky ship of 308 tons, carrying 400 tons. She was built at Svendborg in 1916 under the name of *Saramacca* and in the days of Prohibition she plied in the American rum-running trade. In 1920, she was sold to Holland and in 1932 she was taken over by Yrjanen & Kumpp of Raumo, a great sailing ship firm in the thirties. She was then equipped with a 96 h.p. motor and plied in the timber trade to Denmark. *Ella* has now passed to owners in Piikio, Finland. *Elna*, the second ship, is a three-master of 339 tons gross and she was also built in Denmark in 1918 under the name of *Omar*. I think she was owned in Hull at one time but Yrjanen & Kumpp has had her for many years, and she has also plied in the timber trade to Denmark and Germany. She has just been purchased by owners in Helsingfors.

Perhaps the most interesting of this trio is the 3-masted schooner *Oma*, originally the French *terreneuve Notre Dame de bizeaux*. A large vessel of 356 tons, she was built in Nova Scotia in 1918 and she spent most of her long life cod-fishing on the banks of Newfoundland. She passed to Yrjanen & Kumpp in 1938, and she was fitted with a 170 h.p. motor. The accompanying photograph shows her in the Baltic, outward bound to a Danish port with timber. I expect that these three ships will continue to ply in the timber trade under their new owners. So now Raumo has only two sailing ships left, and their early sale also is expected. Falkirk.

JOHN ANDERSON.



A SMART MODERN SHIP

I enclose two photographs of the motor ship *Ireland* the latest addition to the fleet of the Currie Line of Leith.

Formerly the *I. W. Winch* and owned by Reader A/B. Walhall of Helsingborg, Sweden, this ship was bought by the Currie Line for their Mediterranean trade and is at present on her first voyage for her new owners.

Built at Lubeck in 1951 the ship is 321 ft. in length and has a net tonnage of 1,250.

The photograph (which we reproduce) shows the ship in dry dock at Leith shortly after delivery to her new owners, and the other shows her in the Imperial Dock Leith after repainting in the colours of the Currie Line.

Paisley, Scotland.

THOMAS SUMMERS.

HALIFAX EXPLOSION

The article by Capt. A. G. Course in your July issue makes reference to the historic Halifax explosion during the 1914/18 war. Referring to the very dangerous nature of the cargo carried by munition ships, he writes: "How vulnerable we were was brought home to us when two ships, engaged in the same hazardous voyages, collided in Halifax harbour. They blew themselves to pieces and most of the town as well."

It so happened that the writer arrived at Halifax a week after the explosion and, as far as he can remember, the collision took place in the Narrows

between the French munition ship *Mount Blanc* and a Belgian relief ship. The *Mount Blanc*, which was fully loaded, was reported to have had several thousand tons of T.N.T. on board, but how much of this was in the form of live shell is uncertain. She also carried a deck cargo of benzol in drums which was the real cause of the disaster. The collision stove in a number of these drums whose contents, finding their way into the stokehold, ignited.

The ship burnt for about half an hour before exploding; long enough in fact for the crew to row across the strait and find sanctuary in the low scrub which then covered the further bank. The training cruiser *Niobe* which lay alongside the wharf immediately below the *Mount Blanc* was reported to have sent a fire fighting party on board. They were not heard of again.

A week later the site was a scene of desolation. No visible sign of the *Mount Blanc* remained, only a water filled crater where her berth had been. The Belgian relief ship was lying on the opposite bank, on her beam ends and half out of the water. Even ships nearly half a mile away had lost funnels, masts and a good deal of superstructure. Particularly well remembered incidents were a railway freight car, half submerged on the further shore; it must have been blown right over the site of the explosion by the blast recoiling from the hillside. Also the small wooden tender *Waterwitch* which supplied water to ships lying in the Bedford Basin; this was resting, bottom up on what remained of a cargo shed.

The worst feature of the disaster was the snow blizzards which followed it. Practically all windows in the town were blown out and a great many people blinded by flying glass.

Unquestionably the Halifax explosion was the biggest bang mankind had achieved to date; only within the last few years has a more enlightened generation created the hydrogen bomb.

Caldy, Cheshire.

W. MC. Q. MATHER.

THE REVIEWER CORRECTED

The reviewer of Alan Villiers' book *Way of a Ship* in SHIPS AND SHIP MODELS, August 1954, states that the 5-mast ship *Preussen* was the largest ship ever built.

The following particulars taken from Lloyd's Register Book speak for themselves:

Preussen—5,081 tons, 407 ft. 8 in. × 53 ft. 6 in. × 27 ft. 1 in.

France II—5,633 tons, 418 ft. 8 in. × 55 ft. 8 in. × 24 ft. 9 in.

Preussen was a fine sailer, but so was *France II* as proved by her log, verified in London, averaging 17 knots during ten consecutive hours and sailing 420 miles in a day's run, Iquique to Dungeness in 63 days was no light achievement with 8,600 tons of nitrate.

France II was built by Antoine, Dominique Bordes as an answer to Laeisz's *Preussen*, just as *Potosi* was built in 1895 as an answer to *France I* launched in 1890, the first five-master ever built.

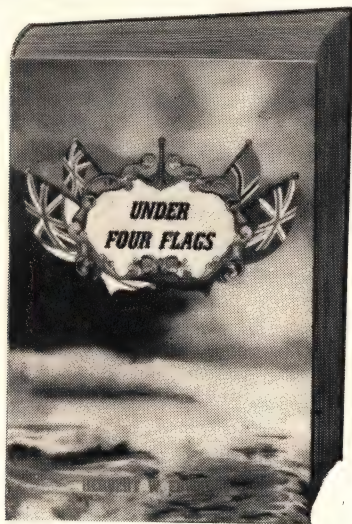
"FORESAIL."



UNDER FOUR FLAGS

By Herbert Wilson Edwards, Captain, R.N. (Ret'd).
Published by Percival Marshall & Co. Ltd., London. 10s. 6d. net.

Captain Edwards has written an absorbing account of what is possibly a unique career during which the author served under the Norwegian Ensign, The Red Ensign of the British Merchant Service, the Blue Ensign of the Royal Navy Reserve, and finally the White Ensign, in sail and steam, at the turn of the century. Reared in a family with good connections, the author was unable to realise his ambition of becoming a cadet in the Royal Navy, and so was sent to sea in a Norwegian ship skippered by a Norwegian who was related to his



mother by marriage. The hardships and privations in an 800-ton ship bound round the Horn to Iquique increased rather than diminished the boy's urge for a seafaring life, and after an interlude in a City office, which he hated, he was duly apprenticed in a British ship. The story of his varied experiences makes fascinating reading, and the contrast between life afloat and his short spells of home life are delightfully described. His impressions of the various feminine friends he met, both at home and in Australia, add colour to the book. We

leave the reader to find out for himself the rather amusing circumstances in which he first saw the young lady who ultimately became his wife. The author passed for his Second Mate's certificate in Australia, and being anxious to get into steam, and not willing to ask his parents for passage money home, he signed on as a deck hand, which led to some queer experiences. After six weeks at home, during which time he spent the first Christmas he had had at home since he went to sea at the age of 14, he obtained an appointment as 5th officer in one of the New Zealand Company's intermediate steamships. This was followed by service in the P. & O. and later with the Royal Mail Steam Packet Co., training for the Royal Navy Reserve, and ultimately service in the Royal Navy. Throughout the book we have glimpses of the various happenings of the period, including Queen Victoria's Diamond Jubilee, the Klondyke gold rush, the Boer War, the 1914-18 war, and on to the recent war, all told from the author's particular standpoint. The illustrations include sailing ships, early steamships, with two lovely clipper-bowed steamships of the Royal Mail, and some photographs of the first occasion on which an aeroplane took off from a ship—with which event the author was concerned. This is a book which will interest readers of all tastes, not only those who love the sea and ships, but all who love life. It is one of the most fascinating books we have read for a long time.

WINDJAMMER MODELLING

By Clive Monk. Published by Faber & Faber Ltd., 24, Russell Square, London. 30s. net.

With the growing interest in miniature ship modelling, this should prove a very welcome addition to the books on the subject. The modelling of warships, and of liners and passenger ships in miniature, has been written up in book form, but apart from two series of articles in the pre-war SHIPS AND SHIP MODELS, this is the only time, so far as we can remember, that modelling windjammers in miniature has received attention. And very charming models they are when well done and when mounted on a realistic sea. The book under review describes the construction of a model of the 4-mast barque *Ross-shire*. It has been written for the beginner, and, as is to be expected, the author's methods are not always those which would appeal to the more advanced worker; but anyone following them intelligently would produce a very attractive model, and one which would be quite reasonably accurate and realistic. After describing the construction of the beginner's model the author adds a useful chapter showing how certain details could be represented more accurately, notably the crosstrees. Some of these drawings are still a little crude, and we do not care much for the method suggested for making ventilator cowls. It is easy to carve them to the correct shape from wood or plastic rod. But our chief criticism is that the scale of the model is not mentioned. From the drawings—which are made full size for the model—the scale is about 30 ft. to 1 in., but it would be nice to know exactly. Presumably the model would be followed by others, and it is advisable to build to a definite scale, if only for the sake of comparison. The book concludes with a series of plans of seven other notable sailing ships from the board of Harold Underhill, with some interesting notes on the differences between them. These will be very useful to the modeller if he aspires to building models of other ships, as he most certainly will once he feels the fascination of modelling this type of ship. We have every confidence in recommending this book to our readers.

SHIP MODELS AT THE "MODEL ENGINEER" EXHIBITION

continued from page 372

of work is to be found in the work of E. N. Taylor (Gosport) who submitted the Wilson liner *Tasso*. He also breaks new ground this year by having a light coloured background to his model. This certainly shows the model to great advantage. The *Tasso* also has some of the crew about the decks. The finish on all these three models is superb.

The Maze Challenge Cup for an oriental ship or pre-1820 ship was awarded this year to a miniature ship, H. F. Milne's *Third Rate* (of 1670). Here was an exquisite piece of work from one of the most decorative periods in naval architecture. His scroll work, was well carried out and the rigging was carefully done. I admired particularly the clean-cut finish of the woodwork.

We have known the work of Mr. G. H. Draper now for many years and this year ships boats were his chosen subject. He started off with a 25 ft. cutter from H.M.S. *Boreas* a Fifth Rate (28 guns) of 1774. Probably the most beautiful of all the service boats shown by Mr. Draper was the 30 ft. cutter for H.M.S. *Warrior* (1860). Here was a boat with beautiful lines. Finish, both woodwork and painting, is up to Mr. Draper's exacting standard. Also shown in this group was a 27 ft. whaler H.M.S. *Collingwood* (1866) and a 32 ft. drop-keel cutter from H.M.S. *Kent* (1923).

A very interesting model, *Marie Celeste*, was

submitted by E. C. Freeston (Greenford). He based all his work on the report of the trial, and has made an excellent job of the model. As an example of how careful one must be in the matter of "sea," he showed the *Marie Celeste* with a wake of three to four knots. There was no bow wave (minor fault) the only square sail was one topsail; there were a couple of head sails but to get such a speed with that area of canvas would require a moderate to fresh breeze at least. There was nothing whatever to indicate any breeze on the surface of the sea.

I noticed a newcomer, R. H. Bellamy, (Sheffield) with his m.v. *Wanderer*, a Harrison liner. Mrs. V. A. Barry of Cape Town, South Africa, made a fine attempt with her *Herzogin Cecilie* and is to be congratulated on her diploma for a good job of work.

Here are half a dozen quick snap-shots of those who gained no award. I11, *Cutty Sark*, spars too heavy, dead eyes and blocks over-scale. I12, poor finish, the gilt work looked obviously cut out. What held the topsail yard to the mast? I36, Harbour Stow on sails but what about slings, cranes, goose-necks and other important details? I30, Service whaler, indifferent finish and thick stem. F11, Gratings over-scale, scroll work should have been better especially as this was the important part of the model (Stuart yacht). I17, Aircraft carrier does not have the scope of other ships therefore concentrate on excellent hull, at least eliminate the grain by finish. I19, shows splendid promise but has poor finish on boats. Many models were spoilt by poor boats.

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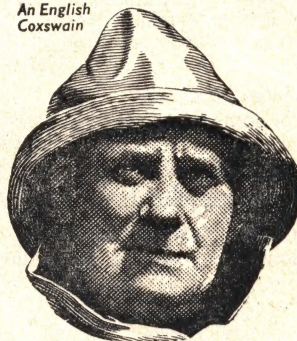
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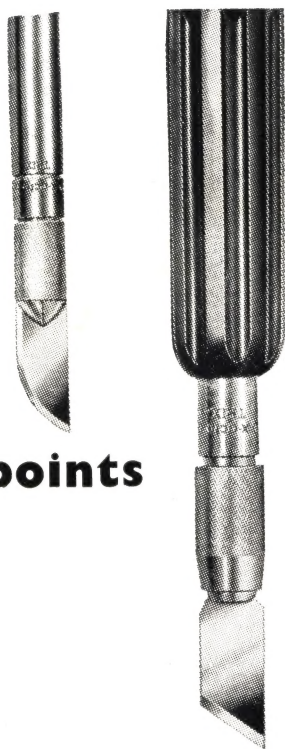
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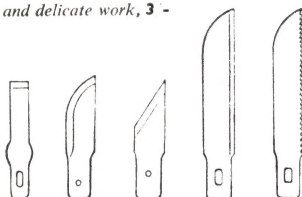


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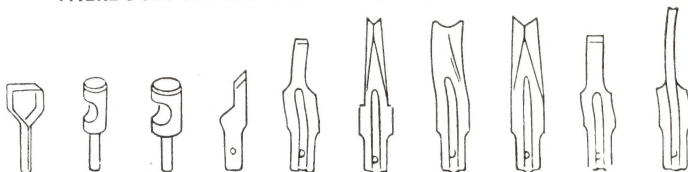
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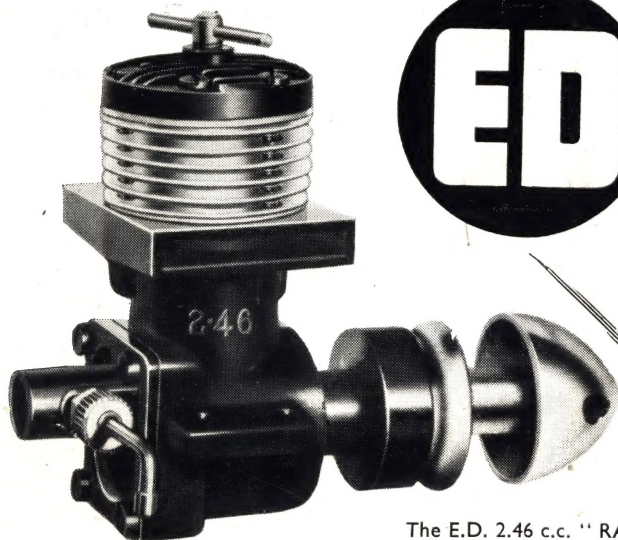
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